

THE ARCHITECT & BUILDING NEWS

IN THIS ISSUE

- LONDON AIRPORT, CENTRAL TERMINAL
- FACTORY AT BASILDON

SEPTEMBER 24, 1953

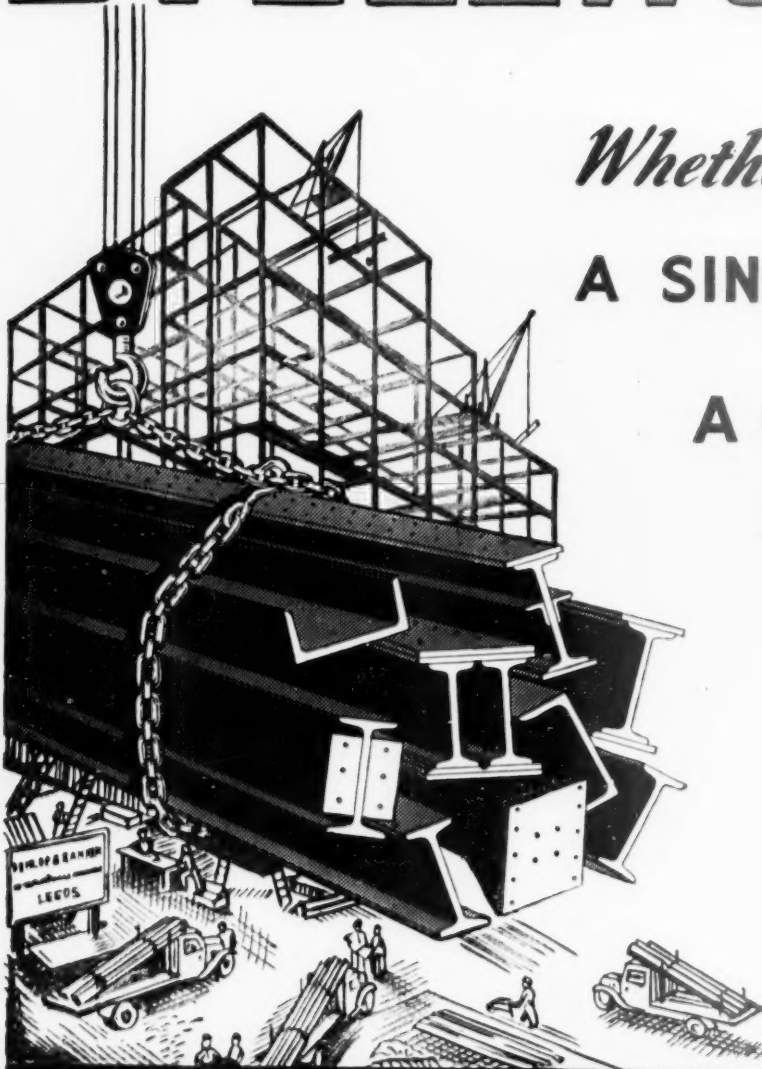
VOL. 204

NO. 13

ONE SHILLING WEEKLY

THE ARCHITECT and Building News, September 24, 1953

STEELWORK



Whether you want

**A SINGLE JOIST
OR
A COMPLETE
BUILDING**

Try

D&R

**STEELWORK
SERVICE**

DUNLOP & RANKEN

CONSTRUCTIONAL ENGINEERS
IRON & STEEL STOCKHOLDERS

LTD

TELEPHONE
27301 (20 LINES)

LEEDS

TELEGRAMS
"SECTIONS LEEDS"

GOOD FACTORY FLOORS

are vital to
industrial efficiency



SOME OF THE BEST

are formed with

Stelcon

Both of these Stelcon Products provide permanent, level, dustless floors able to withstand the toughest of conditions and make efficient handling of heavy industrial traffic easy.

Units are approx. 12" x 12" and are excellent for repair work as well as new work. Full details sent on request.

★ STEEL CLAD
FLAGS

★ ANCHOR STEEL
PLATES

"best where conditions are worst"

STELCON (INDUSTRIAL FLOORS) LTD • CLIFFORD'S INN • LONDON • E.C.
TELEPHONE: HOLBORN 2916

Youngman's Factory, Manor Royal, Crawley

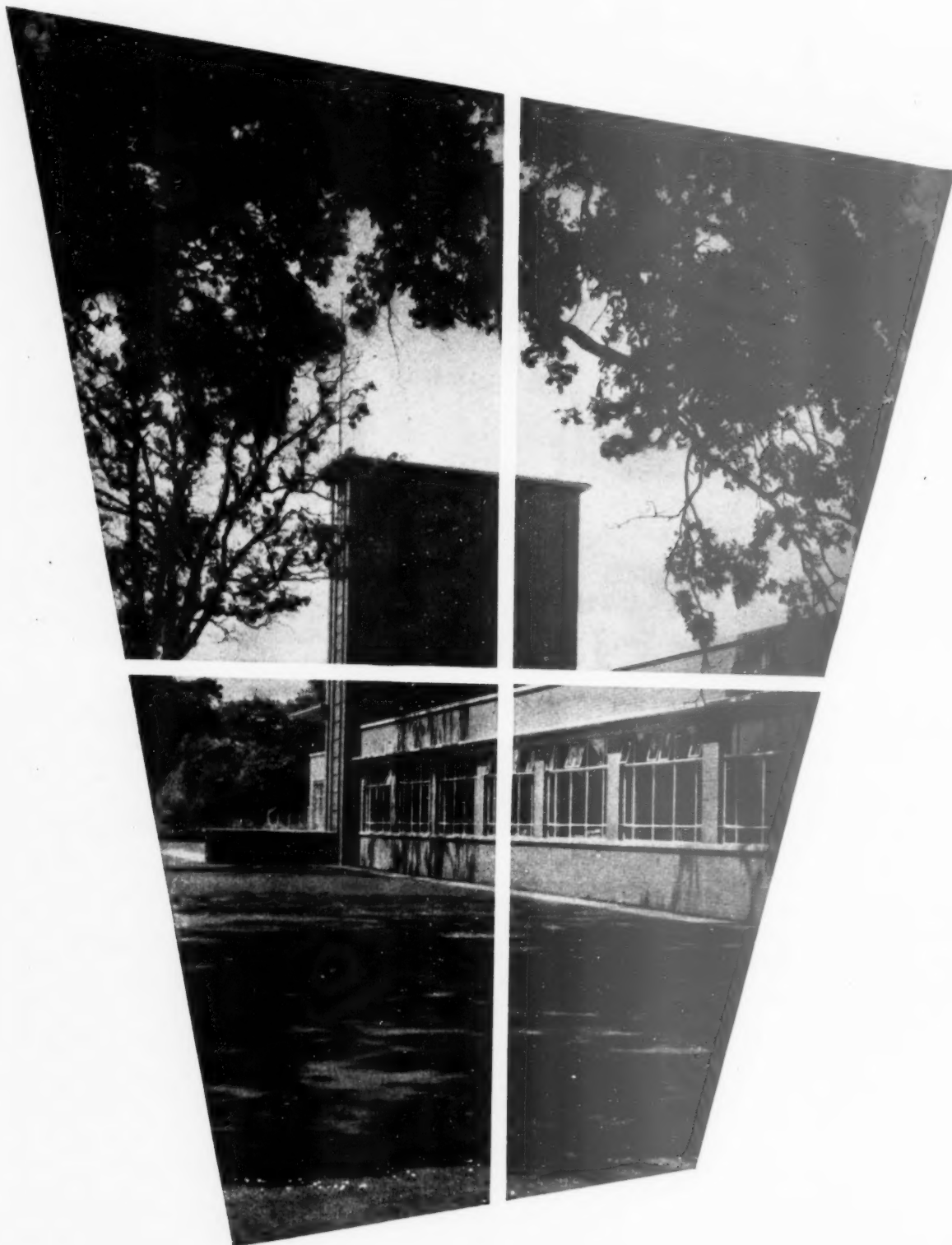
Architect—Albert E. Barnard, A.R.I.B.A. Contractor—James Longley & Co. Ltd.

The housing estate, West Green Neighbourhood, Crawley

By the Chief Architect and staff Crawley Development Corporation, Contractor—Richard Costain Ltd.

Hazelwick County Secondary School

Architect—J. Catchpole, A.R.I.B.A., County Architect East Sussex County Council. Contractor—James Longley & Co. Ltd.





Crawley: Williams & Williams are doing most of the windows

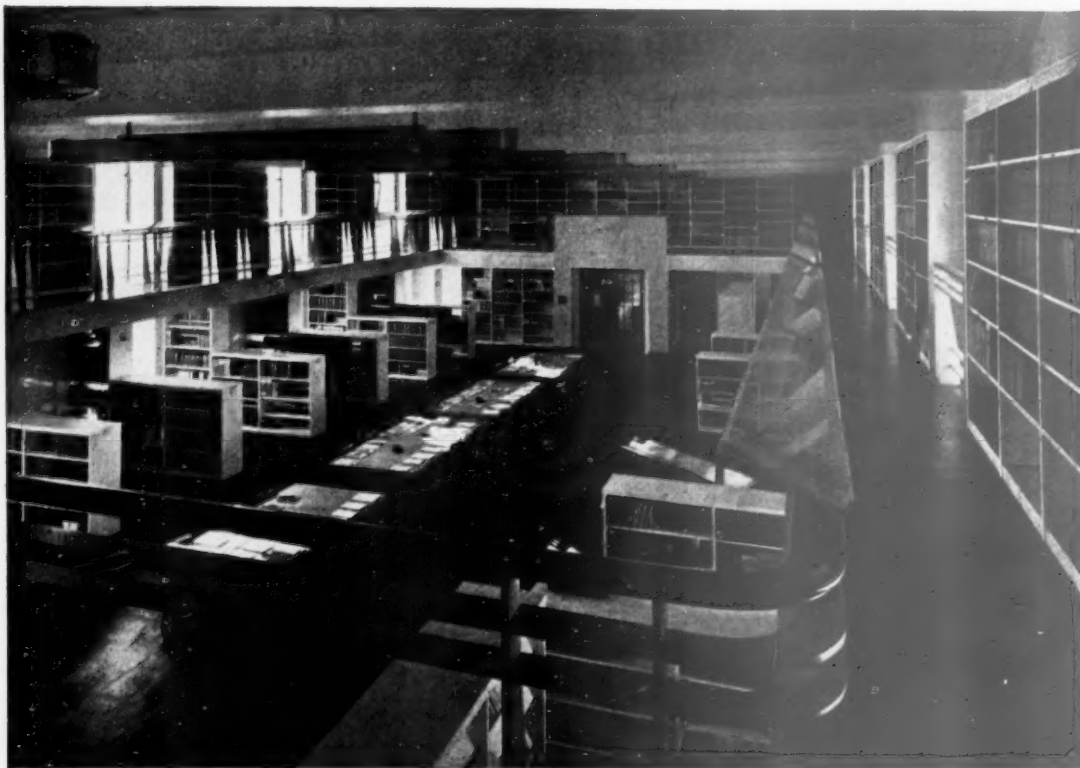
Factories, schools, houses—hundreds of houses. Crawley New Town is growing up fast and the majority of the metal windows — all rustproofed by the zinc spray process, are by Williams & Williams. This includes the medal winning Northgate Estate. (Architect: A. G. Sheppard Fidler F.R.I.B.A., A.M.T.P.I. Lately chief Architect to the Corporation.) Everywhere the Architects have called for pleasant spacious windows — for the grass is green in Crawley, and worth seeing and the sun shines clear through fresh clean air. It's good to be alive in Crawley.

M E T A L W I N D O W S

WILLIAMS & WILLIAMS



MEMO: Steel is free. You can arrange quick delivery of metal windows by contacting any of our 19 offices in Great Britain. Each office will also give you personal service, estimating, technical co-operation and supply fixing teams on site. Williams & Williams Ltd., Reliance Works, Chester.



Photograph by Permission of the Architectural Press

Architect: Maxwell Ayrton, F.R.I.B.A.

NATIONAL INSTITUTE FOR MEDICAL RESEARCH MILL HILL



Highest standards and Dignity in Design are requirements of supreme importance to any building which is built for the Nation's welfare, it is therefore worthy of record that it was our privilege to supply

the Metal Bookstacks for this very fine building.

A staff of experts in this particular kind of work is available to answer your individual problem.

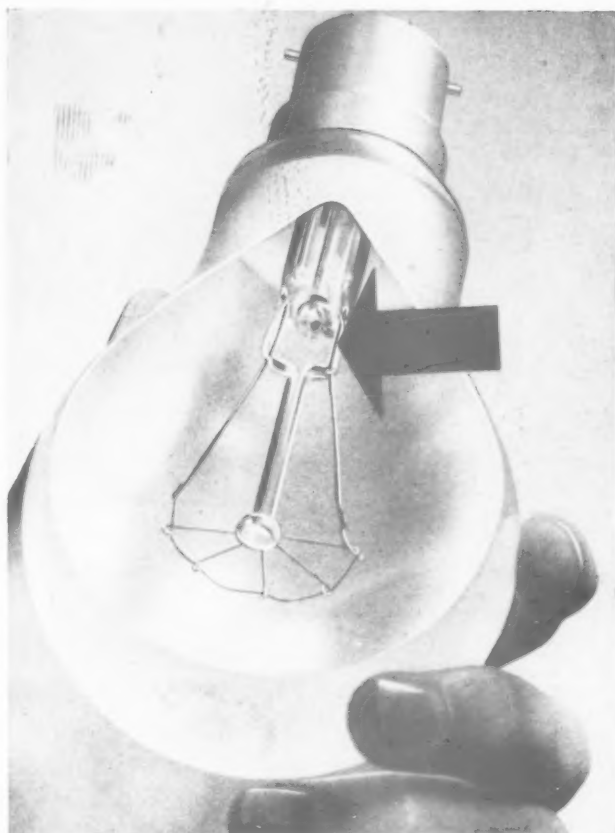
LUXFER LIMITED

WAXLOW ROAD · HARLES DEN · LONDON · N.W.10

Telephone: ELGAR 7292

Telegrams: LUXFER, HARLES, LONDON

Nothing is left to chance...



COPPER CLAD

To secure a gas tight seal at the point where the lead wires pass through the glass envelope of Royal "Ediswan" Lamps a special wire known as Copper Clad is used. This seal must remain gas tight over the range of temperature from cold to the highest value which the lamp attains when alight.

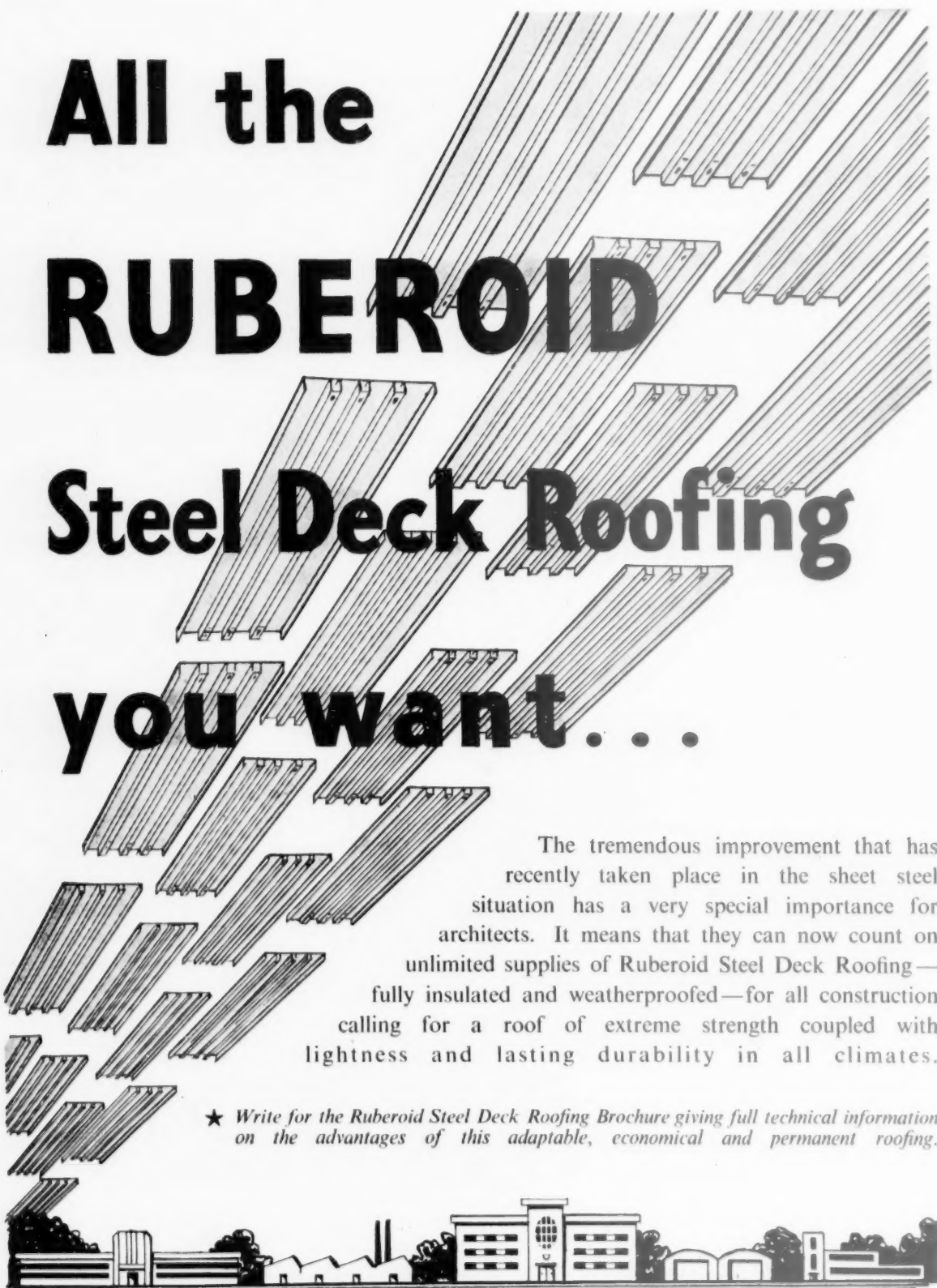
Copper Clad, made by a very specialised technique, consists of two metals hermetically bonded in such proportions that they will expand and contract at the same rate as the glass. This property together with the specially prepared surface, ensures that a perfect metal-to-glass seal is made.

** This is but one example of the intricate operations in the manufacture of Royal "Ediswan" Lamps, calling for the highest degree of skill and the utmost care and precision. Nothing is left to chance—only the finest materials are used and there is strict control at each stage of manufacture.*



ROYAL "EDISWAN" LAMPS

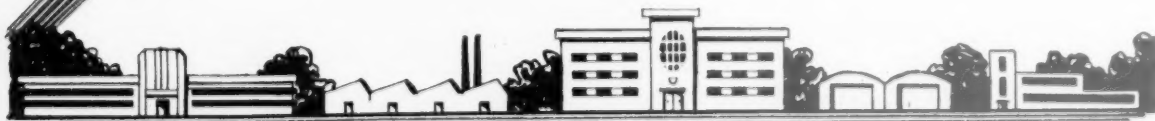
The Edison Swan Electric Co. Ltd., 155 Charing Cross Road, London, W.C.2
Member of the A.E.I. Group of Companies



All the RUBEROID Steel Deck Roofing you want...

The tremendous improvement that has recently taken place in the sheet steel situation has a very special importance for architects. It means that they can now count on unlimited supplies of Ruberoid Steel Deck Roofing—fully insulated and weatherproofed—for all construction calling for a roof of extreme strength coupled with lightness and lasting durability in all climates.

★ Write for the Ruberoid Steel Deck Roofing Brochure giving full technical information on the advantages of this adaptable, economical and permanent roofing.



S.D.138

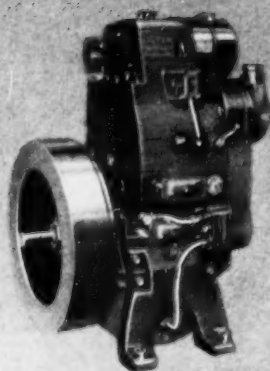
THE RUBEROID COMPANY LIMITED, 93, COMMONWEALTH HOUSE, NEW OXFORD STREET, LONDON, W.C.1.



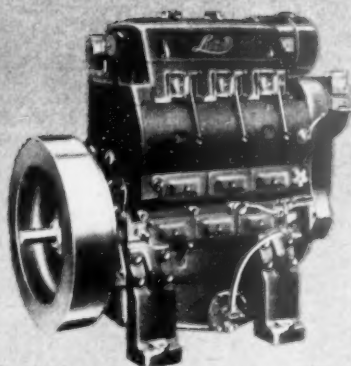
Specialists in high-class joinery for the Building Trade



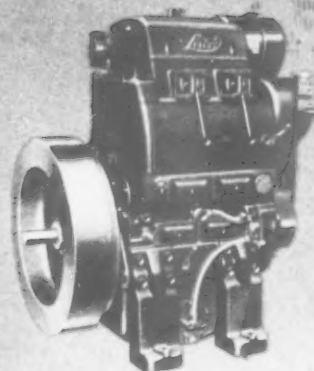
Freedom Diesel Engines



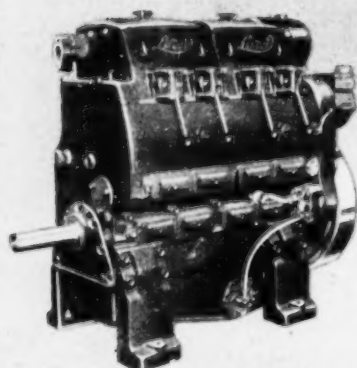
Type FR1 8 h.p. at 1,500 r.p.m.



Type FR3 27 h.p. at 1,800 r.p.m.

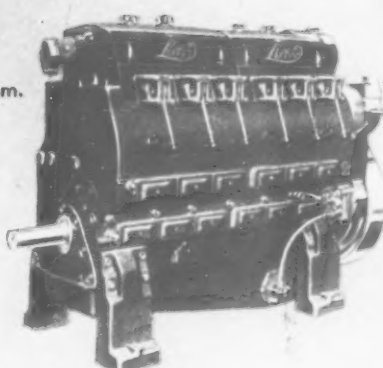


Type FR2 18 h.p. at 1,800 r.p.m.



Type FR4 36 h.p. at 1,800 r.p.m.

Any of these engines can be run at varying speeds down to 800 r.p.m. and supplied with Clutches; Reduction Gears; Housings; Electric Starting; Alternative Chassis Mountings; Speed Control; Radiator or Tank Cooling; Clockwise or Anti - Clockwise Rotation.



Type FR6 54 h.p. at 1,800 r.p.m.

For details and prices apply to:

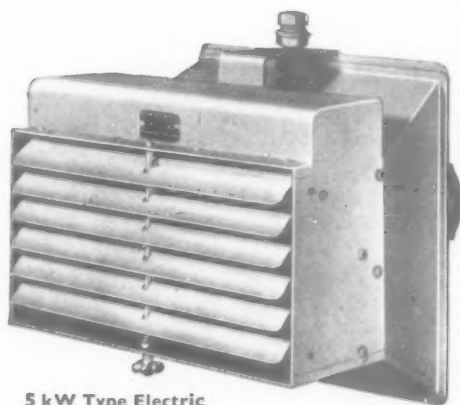
R. A. LISTER & CO. LTD. • DURSLEY • GLOUCESTERSHIRE

Branches: LONDON, STAMFORD, GLASGOW & DUBLIN

LOOK! *of great interest to YOU*

G.E.C. ELECTRIC UNIT HEATERS

You've read about them before—but *here's a summary of their many advantages—*



5 kW Type Electric
Unit Heater.

- ★ Modern and money-saving
- ★ Low running costs
- ★ Very easy to clean and maintain
- ★ They eliminate stoking, fuel storage
and ash removal
- ★ INSTALLATION IS SIMPLE AND INEXPENSIVE

For the factory, workshop, hall—or rest room, there is no better air warmer than the G.E.C. electric unit heater! But write for publication H5—and find out about this modern G.E.C. way of heating.

G.E.C. 5-20 kW & 3 kW
ELECTRIC UNIT HEATERS

THE GENERAL ELECTRIC CO., LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2

What is the

METTEXTURE PROCESS?

It is a simple mechanical process which

literally provides the key to the laying—

or the relaying—of successful floor toppings. A single

mechanical operation prepares the base, leaving it clean, rough and free

from any deleterious matter. Write today for particulars of

THE METTEXTURE PROCESS

METROPOLITAN CONSTRUCTION COMPANY LTD · 66 QUEEN STREET · LONDON, E.C.4 · TELEPHONE CITY 1488

TBW 4

the silver jubilee **building exhibition**

Nov. 18th—Dec. 2nd, 1953

Olympia, London.

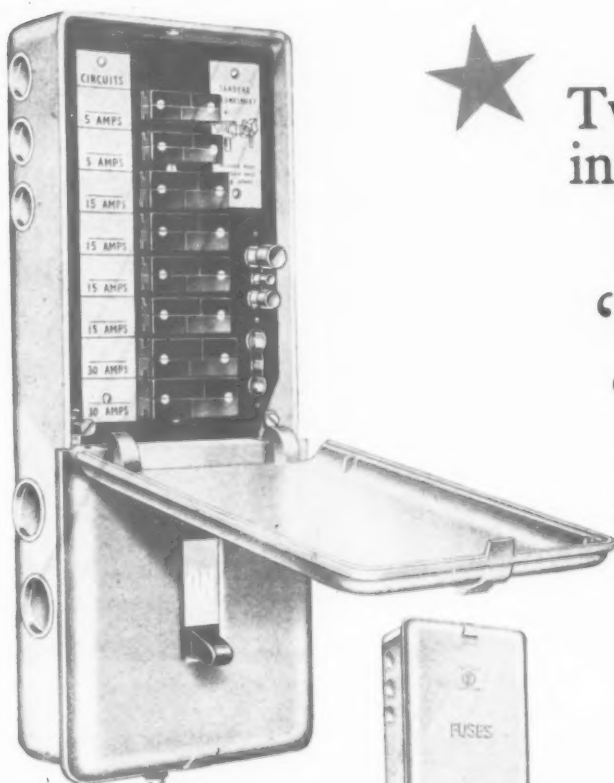
The 1953 Exhibition will be the largest ever held, and will include special features on prestressed concrete, prefabricated houses, schools, etc.

Architects, surveyors and delegates of Local Authorities are specially invited to attend.

The exhibition includes every type of modern material, plant and equipment for the smallest builder and for the largest contractor.

Details :

THE BUILDING TRADES EXHIBITION LTD., 4, VERNON PLACE,
HOLBORN 8146/8 LONDON, W.C.1.



Two items of particular interest to the Architect!

THE "SANDSBURY"

Consumer Electricity Control Unit

Selected by the Council of Industrial Design for the Festival of Britain Exhibition.

Built in conformity with B.S.1454

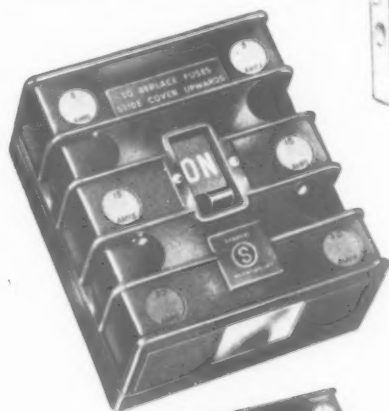
60 amp. Main Switch controlling 2—5 amp. 4—15 amp. and 2—30 amp. S.P. & N. ways, which can be varied.

Cat. No. ES.816.

Dimensions : $14\frac{1}{2}" \times 5\frac{1}{2}" \times 3\frac{1}{2}"$.

Weight : $6\frac{1}{2}$ lbs.

Current list price : 107/6d. each.



THE EG.613

A new All Insulated Consumer Unit, just introduced for the small domestic installation.

60 amp. D.P. Micro-break A.C. Main Switch controlling 2—5 amp. 2—15 amp. 2—30 amp. S.P. & N. circuits protected by cartridge fuses to BS.1361.

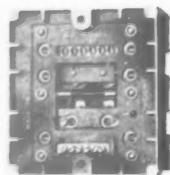
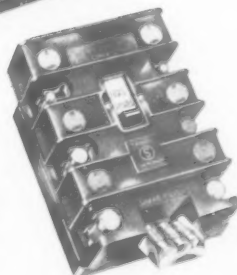
Certain other combinations of ways available.

Cat. No. EG.613.

Dimensions : $4\frac{1}{2}" \times 4" \times 2\frac{1}{2}"$.

Weight : $1\frac{1}{4}$ lbs.

Current list price : 56/- each.

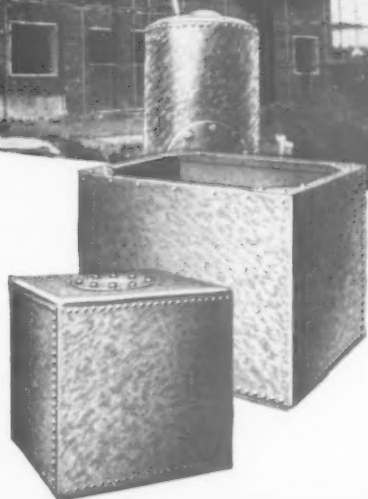


SANDERS WEDNESBURY

WM. SANDERS & CO. (WEDNESBURY) LTD., WEDNESBURY, STAFFS.

"Harco" on Site

Wherever building sites are to be found, there you will also find "Harco" Tanks, Cisterns and Cylinders. They are available in many sizes, and in various thicknesses of metal; including a large selection to BS 417-1951, in both welded and riveted construction. All are galvanized after manufacture, and thoroughly tested before leaving the works. The new type "Harco" Patent Manhole and Cover now fitted to Hot Water Tanks gives quicker installation and avoids corrosion and shearing of setbolts. Bolt heads are secured inside the tank, and no jointing other than the rubber ring supplied is necessary to give a perfect seal in 1/3rd the usual time. For full particulars write for Catalogue 873.



G.A. Harvey & Co. (London) Ltd. Woolwich Road, London, S.E.7



ELLARD ESTATE SLIDING DOOR GEAR

ELLARD "Estate" Sliding Door Gear has again been specified for a large housing estate: the People's Houses, Canterbury, Kent. "Estate" Sliding Door Gear offers maximum economy in use of space. For easy access and efficient action, garage doors should be fitted with ELLARD "Radial" Sliding Door Gear. The illustration below shows a typical domestic garage with sliding doors running on ELLARD "Radial" Door Gear.

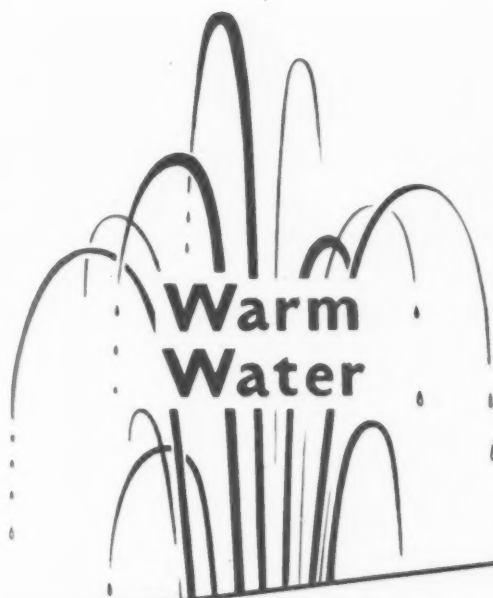
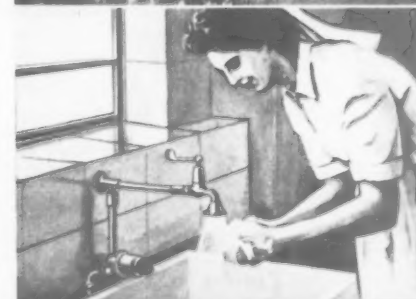
ELLARD RADIAL

ELLARD Sliding Door Gear has been specified for flats and housing schemes by: London County Council; Canterbury and Peterborough Corporations; Eton, Mexborough, Rushden, Sawbridgeworth and Wellingborough U.D.C.s; Easington and Sedgfield R.D.C.s; and for British Railways Housing Estate, Southall; Coronation Bungalows, South Shields; Kyles Settlement Estate, Watford; Newton Aycliffe and Stevenage New Towns.

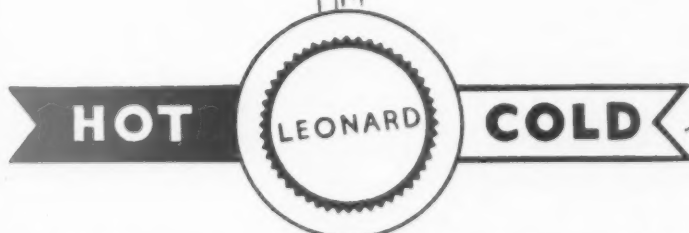
CLARKE ELLARD ENGINEERING CO. LTD.
Works Road, Letchworth, Herts. Tel.: 613/4



B.M.J.



Leonard
THERMOSTATIC VALVES
for AUTOMATIC mixing
of hot and cold water

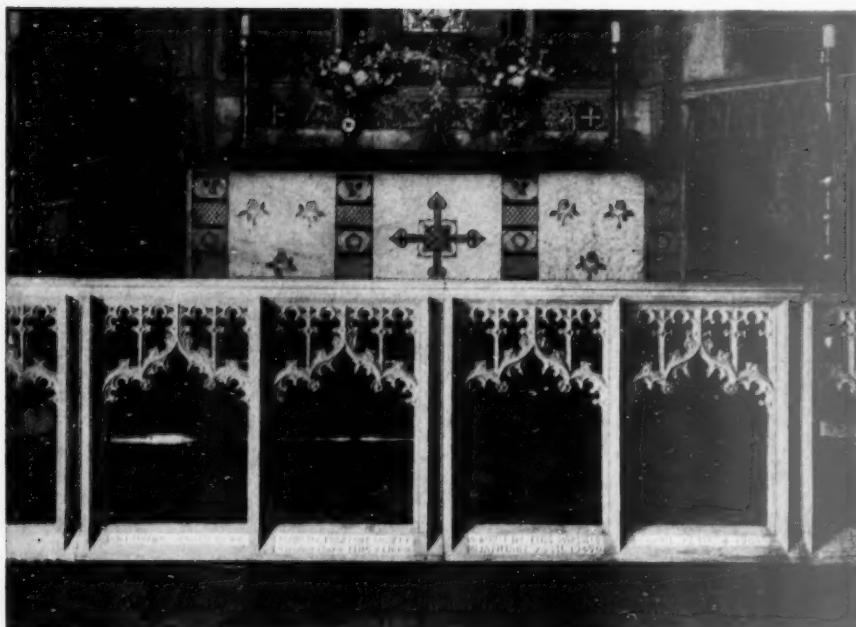


The Leonard Thermostatic Mixing Valve automatically mixes hot and cold water to give warm water at the right temperature for use. The thermostat keeps the temperature of the warm water steady, preventing those sudden changes from hot to cold and back again, which are always uncomfortable and often dangerous.

Fuel cannot be wasted by using water that is too hot. Leonard Thermostatic Mixing Valves are specified by leading architects, engineers, Government and municipal authorities.

Please write for pamphlet No. 1/A.

WALKER CROSWELLER & CO., LTD.
Whaddon Works, Cheltenham Glos.



Finely carved
**ALTAR
RAIL**
in English Oak
PERSHORE ABBEY

Specially designed
for
GEORGE DOWTY, Esq.
and made by

H.H.MARTYN
& CO. LTD. CHELTENHAM

a subsidiary of
MAPLE
& CO., LTD.

Specialists in
ECCLESIASTICAL FURNISHING

MAPLE & CO. LTD., TOTTENHAM COURT RD., LONDON, W.1.
BIRMINGHAM · BOURNEMOUTH · BRIGHTON · BRISTOL · LEEDS · LEICESTER · NOTTINGHAM
GLASGOW OFFICE: 116 HOPE ST.



Contents:

Housing, Schools, Community Centres, Factory Buildings, Office Buildings, The Motor Vehicle, Shops and Stores, Municipal Buildings, Law Buildings, Museums and Art Galleries, Libraries, Fire Stations, Hospitals, Clinics and Health Centres, Crematoria, Lavatories: Public and Communal, Covered Baths and Wash-Houses, Open-Air Swimming Baths, Sports Pavilions, Hotels, Holiday Hostels, Holiday Camps, etc.

*A new edition of
an invaluable book*

PLANNING

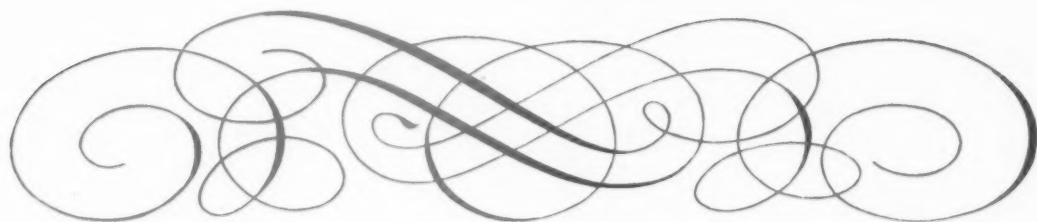
THE ARCHITECT'S HANDBOOK

By *S. Rowland Pierce, V.P.R.I.B.A., Dist.T.P., Rome Scholar in Architecture*; and *Patrick Cutbush, A.R.I.B.A., A.A.Dip., A.I.L.A., R.I.B.A., Alfred Bosson Gold Medallist*. The indispensable reference book for all who plan and design buildings, providing essentials of plan types and the more important details. The 32 sections, all fully illustrated, cover in concise form almost every type of building the architect is likely to encounter today. This new edition has been carefully revised, a special feature being the enlarged section on buildings for motor vehicles.

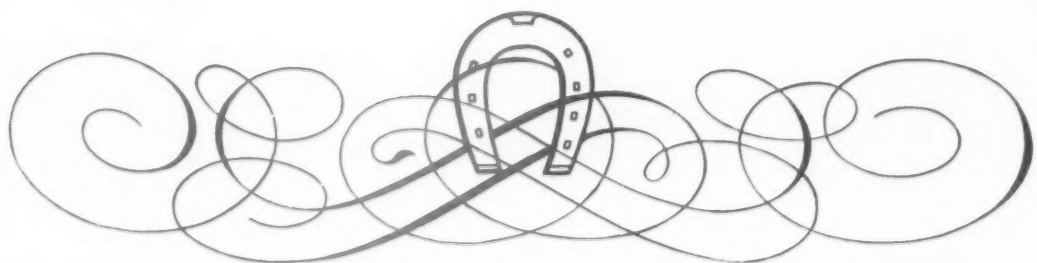
7th. Edition 572 pp. 655 illustrations 30s. net. By post 31s. 6d.

Obtainable from booksellers or direct from:

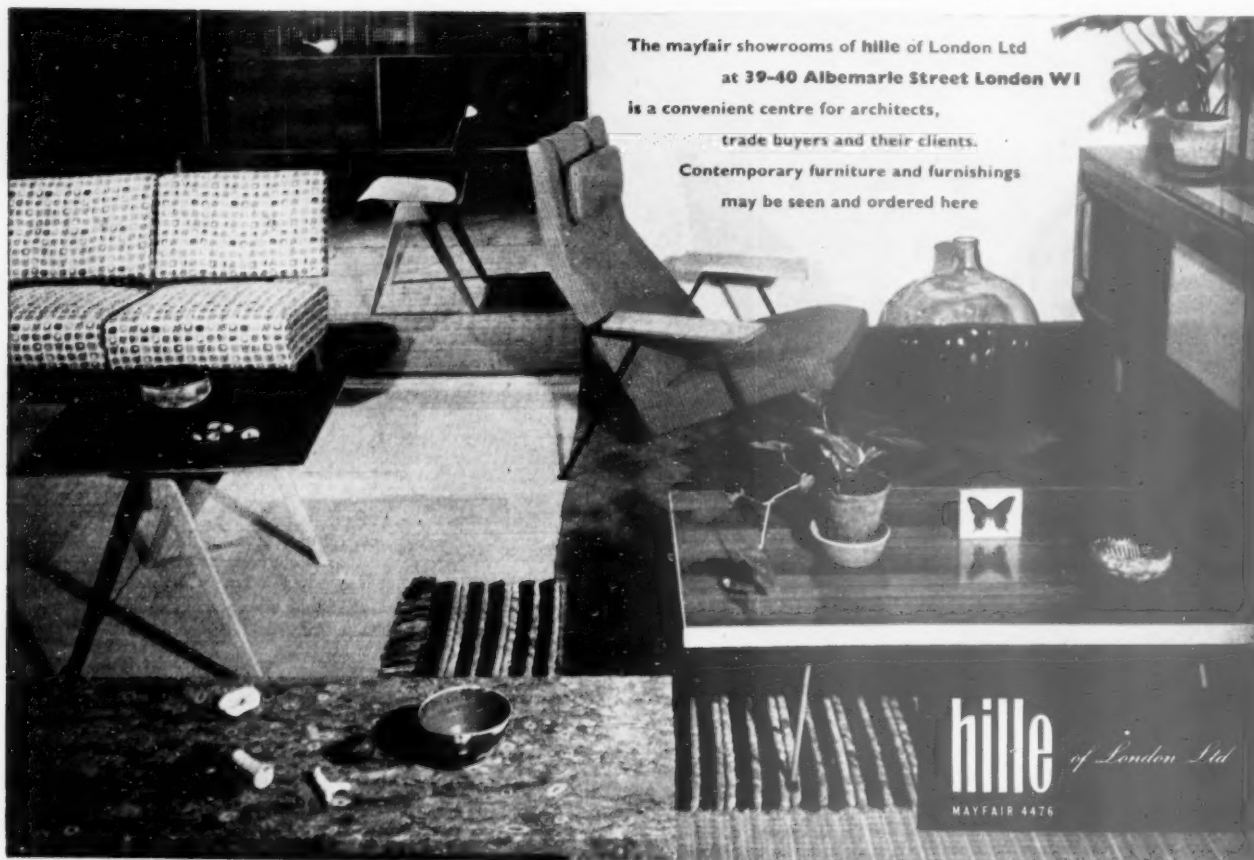
Iliffe & Sons Ltd., Dorset House, Stamford Street, London, S.E.1.



For
Superior Concrete
use
Ketton Cement



THE KETTON PORTLAND CEMENT CO LTD • ALBION WORKS SHEFFIELD



The mayfair showrooms of hille of London Ltd
at 39-40 Albemarle Street London W1
is a convenient centre for architects,
trade buyers and their clients.
Contemporary furniture and furnishings
may be seen and ordered here

hille of London Ltd
MAYFAIR 4476



DESIGN

is the basis of

PRODUCTION

The call for increased production brings added responsibility and fresh problems to the Drawing Office.

Our function is to provide the Designer and Draughtsman with equipment and materials which will enable them to work with the greatest efficiency, and indeed many of the methods and processes used in the modern drawing office are the results of our research and initiative.

Our century's experience is at your disposal.

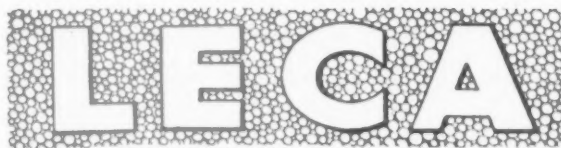


HALL HARDING LTD

LONDON



COARSE GRADE



LIGHTWEIGHT EXPANDED CLAY AGGREGATE

FOR THERMAL INSULATION

of

FLAT ROOFS

and for

FLOOR SCREEDS

With a K value of .9 and a weight of only 20 - 25 lbs. per cu. ft., coarse grade LECA possesses the essential properties of an insulating medium, for flat roofs and floors.



Full details of Leca for floor and roof screeds, also names of manufacturers of hollow and solid partition blocks, load bearing blocks, etc., made with Leca, will be given on application to:

THE CEMENT MARKETING COMPANY LTD.

*Portland House, Tothill Street, Westminster
London, S.W.1*

Don't take chances ...
with your **Glazing**

Specify **ARBOLITE**
METAL CASEMENT PUTTY

***ARBOLITE** contains **Arbosyn**

Arbolite is the only putty containing Arbosyn
which ensures:

FREEDOM FROM CRACKING
FREEDOM FROM WRINKLING
GREATER DURABILITY
BETTER KEYING PROPERTIES
GOOD SETTING PROPERTIES
EASY WORKING CONSISTENCY
LONGER KEG LIFE

Broadgate House, Coventry.

Glazed throughout with ARBOLITE

Architect: Donald E. E. Gibson Esq. City Architect & Planning Officer
Contractor: Messrs. Higgs & Hill Limited, Coventry.
Glazier: Glass (Coventry) Ltd., Coventry.



ADSHEAD RATCLIFFE & CO. LTD. · BELPER · DERBY · Tel. Belper 351/2

Maxheat
OVAL

TUBULAR ELECTRIC HEATERS

*meet all
the demands
for space heating*



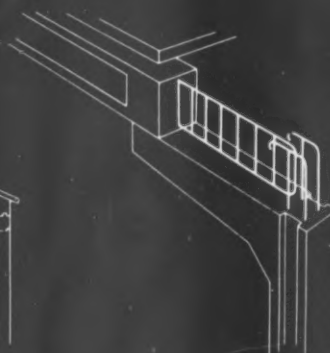
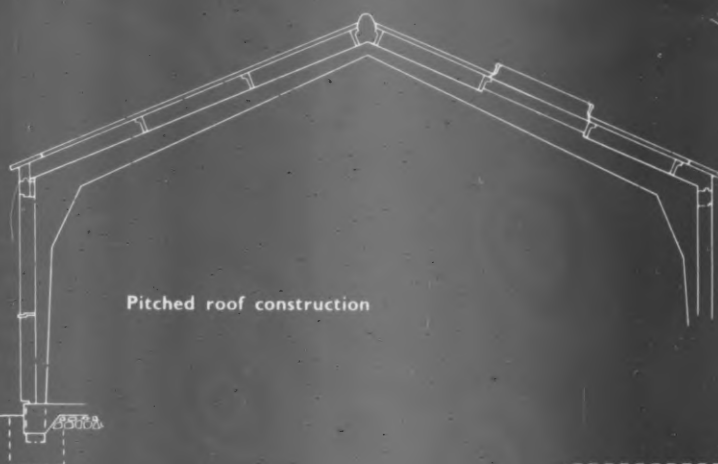
Maxheat Tubular Electric Heaters are suitable for installation in bungalows, houses, public buildings, hotels, theatres, industrial departments and factories, etc. They transfer their heat to the air extremely quickly, develop lower surface temperatures and are perfectly safe. Maxheat Tubular Heaters are simple to install and the STREAMLINE OVAL, unobtrusive and attractive in appearance, will harmonise with all design of modern interior decoration. Maxheat Tubular Heaters are available in all standard lengths from 2 to 17ft., single or in banks, in 60 or 80 watt per ft. Installations may readily be added to as and when required. The system is extremely elastic and a point not to be lost sight of is that room heating with Maxheat needs less tubing outlay than with competitive systems and will reduce initial installation costs. These are the reasons why Maxheat are the "World's best sellers."

*Get MAXHEAT—"more heat with less feet"

THE Wardle

ENGINEERING CO. LTD. Old Trafford, Manchester 16.

For every type of building there is an Orlit structural frame



North Light construction

The General Purposes Scheme is suitable for single, double or multiple storey building

ORLIT SYSTEM OF REINFORCED CONCRETE

ORLIT LTD. Colnbrook By-Pass,
Bucks. Tel: Colnbrook 351

ORLIT (Lancashire) LTD. 3 Brown Street,
Manchester. Tel: Blackfriars 0718

TARSLAG LTD. Tees Bridge,
Stockton-on-Tees. Tel: 6355

ORLIT MEANS EFFICIENCY IN PRE-FABRICATION



You cannot afford to wash your hands of water treatment problems

Which would you rather have — cheap and effective water treatment or high maintenance costs? — it is as simple as that. In any hard water district hot water circuits, calorifiers and cooling systems will soon become scaled unless the water is treated. A few parts of Calgon or Micromet* per million parts of water will effectively prevent the formation of scale and avoid the heavy maintenance costs which result. Calgon and Micromet are very easily introduced into the water system. Ask for full technical details about Threshold Treatment — effective not only as a preventative of scale formation, but also against corrosion or tuberculation of iron water mains in corrosive soft water areas.

** Micromet is a slow-dissolving form of Calgon for the smaller installations.*

**It costs nothing
to consult
Albright & Wilson
about
Threshold
Treatment
with
CALGON**



ALBRIGHT & WILSON LTD · 49 PARK LANE, W.1 · TELEPHONE GROSVENOR 1311

10-11-53

Strong · Light · Economical
Sound resisting

TRUSCON

The Proved
Precast floor

Type 1



The Truscon Precast Floor has been installed in countless buildings over a period of years. It is made in two standard widths in any length up to 18 feet, the depth of the unit varying according to load and span. Its many advantages include:— Elimination of close-boarded shuttering: Light weight in relation to span and load: Economy in steel: Speed of erection and Sound resistance.

Truscon Precast Floors are specially designed for each job.

Full working drawings are provided to the contractor. We will quote for fixing, and any ancillary reinforced concrete work.

These floors are backed by our full resources as specialists for nearly 50 years in reinforced concrete design and construction. Resident Engineers operate from our branch offices in all parts of the country.

Write to our Publicity Dept. for a copy of our latest booklet

THE TRUSSED CONCRETE STEEL CO. LTD.

REINFORCED CONCRETE ENGINEERS & CONTRACTORS
TRUSCON HOUSE, LIVER MERE, LANCASHIRE, ENGLAND

NEW DESIGNS FOR LIVING No. 3 . . .



THIS house is designed for a new town in an area where there is a high density of population. Because of the sloping ground, certain rooms have been arranged to be accessible from the staircase half-landing, and the inclusion of a garage and cellar within the area has produced a compact plan unit.

The reinforced concrete box frame construction allows external panel walls to be varied in design to enhance the street architecture; this construction also allows for plenty of light on both sides of the house.

The roof is covered with clay tiles and the timber joists are covered with a layer of fibre glass.

*Designed by Leslie Gooday, A.R.I.B.A., M.S.I.A.
and C. Wycliffe Noble, A.R.I.B.A., Dip. Arch.*



FIRST FLOOR

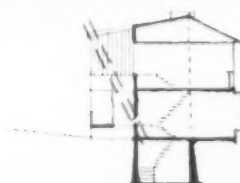
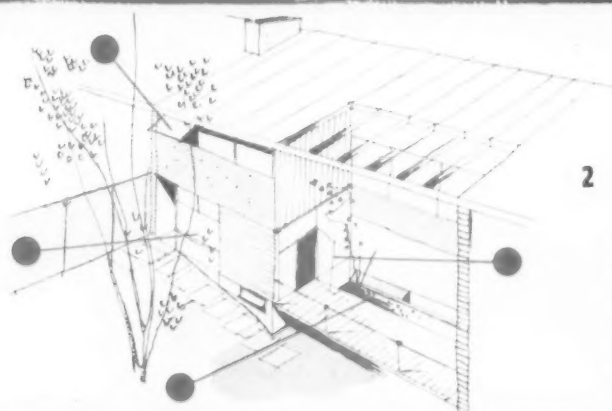
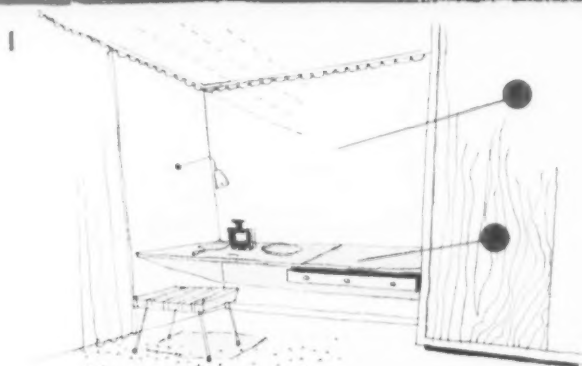


GROUND FLOOR

GLASS IN THE TERRACE HOUSE

A Silvered Polished Plate glass back to dressing table

B "VITROLITE" top

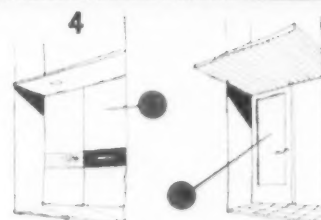
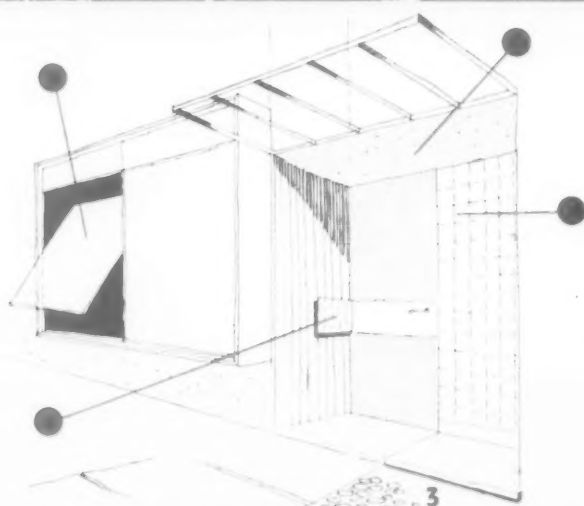


C S.Q. 32 oz. Sheet glass windows to bathroom and bedroom

D 1" Rough Cast glass window to kitchen

E "INSULIGHT" Double-Glazing units

F Prismatic glass window to lounge



G "VITROLITE" panel in ceiling

H "INSULIGHT" Hollow Glass Blocks

J 1/4" Polished Plate glass name panel, acid etched

K "INSULIGHT" Double-Glazing units

L Panel of 1/4" Georgian Wired Cast glass

M Door with panel of 1/4" Polished Plate glass coarse stippled on acid obscured

WILKINGTON BROTHERS LIMITED

Head Office: 100, Abchurch Lane, London, E.C. 4. Telephone: 01-4039 1111. Telex: 2500 WILK. Cable: WILKINGTON. Branches: Birmingham, Bristol, Cardiff, Glasgow, Liverpool, Manchester, Newcastle, Nottingham, Plymouth, Southampton, Swansea, Tyneside, Wolverhampton.



ASBESTOS-CEMENT IN BRITAIN'S HOUSING DRIVE

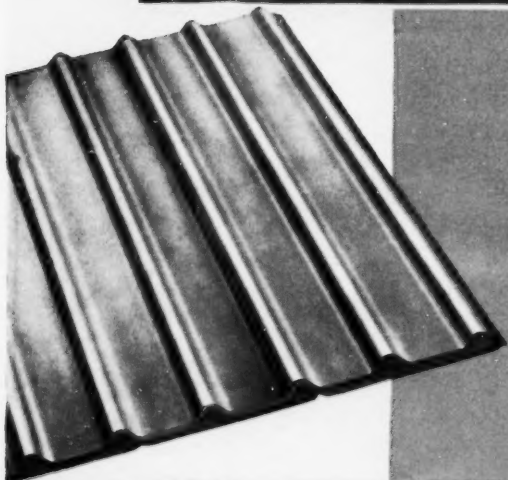
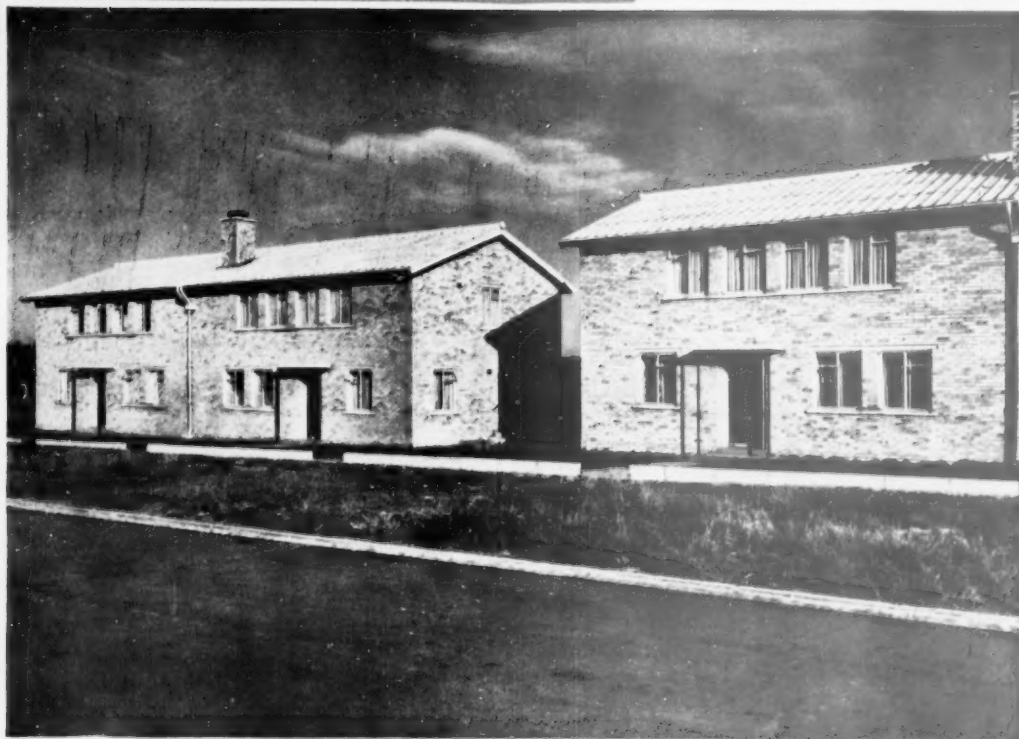
"EVERITE"
REGD TRADE MARK
ASBESTOS-CEMENT
RAINWATER GOODS

Need no Painting

Reduce Maintenance Costs

Manufactured in accordance with

B.S. 569



"TURNALL" REGD TRADE MARK ASBESTOS-CEMENT COMBINED SHEETS

PAT. NO. 616849

PAT. NO. 674140

PAT. NO. 675910

Roofing with large sheet units requires only direct purlin support and thus permits very considerable economy in roof construction.

"TURNALL" Combined Sheets provide the advantage of "double skin roofing" in one operation with improved Thermal Insulation.

The photograph shows the use of this product together with "Everite" Asbestos-Cement Rainwater Gutters and Pipes at Maisonette Flats on the Houldsworth Valley Estate, Newmarket.

Architects: H. G. Kenyon, L.R.I.B.A.

TURNERS ASBESTOS CEMENT CO LTD

A MEMBER OF THE TURNER & NEWALL ORGANISATION

TRAFFORD PARK

MANCHESTER 17

Gas in the design for living



Utility room

The illustration shows, on the right, sectionalised space heating equipment complete with flue construction and, in the background, part of the catering equipment section.



Exhibit designed by Montague Reed, M.S.I.A. Contractors: David Esdaile & Co., Ltd.

The new enlarged gas and coke exhibit at the London Building Centre is now open. In it visitors will find the latest information on the use of gas and coke, mainly for domestic, but also for commercial purposes. Also shown are approved methods of gas and coke installation, together with examples of the latest equipment. A technical representative is available to answer queries and there is a comprehensive reference library. Visits from individuals or parties are welcomed (prior notice of a visit from an organised party will be appreciated).



Information



Kitchen



Lounge



During the fourteenth century the skilled weavers of Arras brought to the ancient art of tapestry-making such a wealth of fine design and rich colour that the Flemish product was known for centuries as "arras" to distinguish it from inferior tapestries. The colour of the Semastic Decorative Tile illustrated is the rose standardised by the British Colour Council, based upon the rose in the finest examples of arras work in existence.

The colours in the Semtex Vinyl and Semastic Decorative Tile ranges were chosen in collaboration with the British Colour Council.

✱ *One of the eighteen plain and marbled colours in the Semastic Decorative Tile range*

ms/44

VINYL and SEMASTIC DECORATIVE TILES

products of a Dunlop Company

are installed by—

J. A. Hewetson & Co. Ltd
Hollis Bros. Ltd
Horsley Smith & Co. (Haves) Ltd
Pilkington's Asphalt Co. Ltd
The Penmaenmawr & Trinidad Lake Asphalt Co. Ltd
The Limer & Trinidad Lake Asphalt Co. Ltd
Semtex Ltd
The Western Trinidad Lake Asphalt Co. Ltd

THE ARCHITECT & BUILDING NEWS

September 24, 1953

The "Architect and Building News" incorporates the "Architect," founded in 1869, and the "Building News," founded in 1854. The annual subscription, inland and overseas, is £2 15s. 0d. post paid: U.S.A. and Canada \$9.00

Published by ILIFFE & SONS LTD., DORSET HOUSE, STAMFORD STREET, LONDON, S.E.1
Telephone: WATERLOO 3333 (60 lines). Telegrams: "ARCHITONIA, SEDIST, LONDON."

Branch offices: Coventry: 8-10 Corporation Street; Birmingham: King Edward House, New Street;
Manchester: 260 Deansgate. Tel. Blackfriars 4412 (3 lines); Deansgate 3595 (2 lines); Glasgow: 268 Renfield Street.

DESIGN AND CONSTRUCTION

MR. MARPLES, in the speech of August 6 that was received so unfavourably in the architectural press, told architects that "design and construction must be married." This has been the aim of every good architect for centuries, and Mr. Marples has simply caught up and is leading from behind. In fact, Mr. Goodhart-Rendel said the same thing better and earlier in the year.

"In buildings made for the service of man, architecture begins where utilitarianism leaves off, endowing practical contrivance with æsthetic significance. . . . The concocter of the picturesque contrives for use, and prettifies his contrivance whether successively or simultaneously; he conceives his task to be that of reconciling use and elegance rather than of being useful elegantly. . . . If those who feel the need to hit something would hit the prettifiers no one need wish to restrain them. Unfortunately, with misdirected aim they are apt to hit not the prettifier but the architect on the head."*

In fact it is seldom, if ever, that laymen attack architects who prettify. In the opinion of most of them a more widespread fault with buildings lies in the opposite direction—uglification. The professional man prides himself on having a correct sense of values. Good planning comes first, together with sound construction. Ornamentation comes much lower down the scale. At this point we find Sir H. Wootton's too-well-known phrase comes to the tip of the pen, and will take it as said. The quality of "Delight" falls closer, we hold, to the prettification end of the scale than to the uglification pole. The general public certainly appears to think so, however uncertain its taste may be in architecture it is towards what gives pleasure at a glance, and its

respect for architects is proportional to their ability to please the untutored eye. But how often when the public has asked for cake has it been offered a stone. How many buildings, sound, and fairly serviceable, have been uglified at considerable cost and with much exercise in skill, the result being, æsthetically, medicine. The puritanical severity of so many buildings erected during the last 100 years or so is the work of architects over-fearful of prettification. In the jargon of psychology they express only too well the "reality principle" rather than the "pleasure principle."

The part that materials play in giving pleasure to the eye is very great, but economic circumstances force the hand. Even so rubble, flint and patterned brickwork widely used in contemporary design, but too often they appear in self-conscious slabs awkwardly juxtaposed in a way that might lead one to think them exhibits being tested for weathering capacity rather than composed elements in an architectural unity.

Better use of colour has lessened the gap between the public and the designer. More could be done. Recently, on a visit to one of the new towns, we noticed a row of lock-up garages, all the doors of which were painted the colour which Mr. Clough Williams-Ellis has labelled "dried blood." The fact that this colour had been used in a charming neighbourhood made it look no better, nor since it was probably specified under a much more beguiling name.

There is not much room to manoeuvre among all limiting factors that beset the architect.

He has to choose colours that are light-fast before those he would prefer; the bricks he would use if he could are either too costly or too few; Ministers tell him (A) to cut out all "frills"; (B) to design

* "English Architecture Since The Regency," by H. S. Goodhart-Rendel. Constable, 1953.

boldly; rising costs are not conducive to the production of "delight." But if architects allow themselves to be deprived of their powers to please in the sense that their predecessors often managed to do, the support of the public will atrophy in proportion. The Coronation decorations attracted thousands of

spectators from all over the country for the simple reason that we are all starved of this form of "delight." What works for the temporary should apply equally to the permanent in architecture. Design and construction are only waiting for the licence to get married. Who has the power to issue that? I

EVENTS AND COMMENTS

LONDON AIRPORT

The event of the week was undoubtedly the publication of drawings of the terminal buildings at London Airport designed by Frederick Gibberd. The central block and passenger handling building are illustrated elsewhere in this issue and public spaces will be dealt with next week. This note covers first impressions only as I am out of town and have not had a proper chance to look at the drawings.

I understand that the plan is so arranged that when you emerge from the tunnel at the terminal end the tall tower surmounted by flying control will be the first thing which you see high above you. The general first impression will be of enclosed space with buildings all round. As you move into the passenger building this view will suddenly change as the vast expanse of the airfield comes into view through continuous windows. The great contrast between these two areas with the natural change of lighting should be most impressive.

Gibberd has produced a handsome and straightforward design, he does not think airport buildings should be "streamlined" like aircraft and for that everyone will be grateful. The buildings are steel framed, as anyone travelling the Bath or Portsmouth roads can see, and are to be finished in warm brown brick. I am particularly glad about the brick. This is, after all, a brick country—very probably the Brazilians would use bricks if they had any, and I know of no other international airport whose buildings are in brick. My usual recollection is of blinding white concrete.

The buildings now under construction are for "short-haul" traffic where the volume of passengers is largest, and a neat sausage-machine system for dealing with passengers and their luggage in parallel streams has been worked out. In the early days of airport design no one had any very clear idea of the volume of traffic which might be expected and flexibility in planning was the great cry. With the post-war years for experience the authorities have evidently come to the conclusion that the system as shown in Mr. Gibberd's building is likely to prove satisfactory for some years for it is clear that the arrangements could not easily be changed.

It is said that the whole of the aircraft side of an airport is now thoroughly understood and satisfactorily coped with and that passenger handling is the real problem. I have heard doubts expressed about the adequacy of the car-parking space in the terminal area. If it is in fact inadequate we may be landing ourselves with yet another splendid traffic problem. Can you remember pictures of the crowds at Tempelhof Airport, Berlin, on a normal Sunday afternoon in the summer?

I am delighted to hear that Mr. Gibberd has provided a Waving Base. The trouble about waving to people in aeroplanes is that it is almost impossible to see whether they are waving back. The public enclosures at Northolt

and Heathrow are so far from the passenger area that you can scarcely see, even with the aid of a telescope the *va et vient* of the lucky people travelling by air. This has been put right by Mr. Gibberd.

THE ROYAL FESTIVAL HALL

It is no news that for ballet performances a large stage is erected in the Royal Festival Hall. I saw it for the first time the other day. From the very large attendance it is obvious that in putting on ballet the L.C.C. is providing the public with what it wants. It should also be making a big financial success of it. But, and it is a big But, the appearance of the hall is ruined by the stage. The proscenium is surrounded by the dowdiest of curtains, while a number of boxes and quite a lot of side seats are rendered unusable, the lighting is disturbed and the general shape and proportion of this very striking building are quite spoiled.

One cannot blame the L.C.C. for trying to make the Hall pay, but I feel very strongly that if they really wanted to put on stage productions they should have said so in the first place so that the architect could have made arrangements accordingly. It is clear that more ballet will be produced in the Festival Hall and we must accept the fact, but the L.C.C. should, before the next ballet season, find out whether it is not possible to construct a proscenium wall which is more in keeping with the interior of our finest post-war building.

There were, some time ago, disquieting rumours about the way in which the Hall was being maintained. Possibly some improvements have been made, for I particularly noted how clean and well everything looked. The only thing that spoiled the scene was the horde of badly dressed people attending the performance. The Royal Festival Hall is a place where the audience should be well dressed and that may be a criticism of the architecture and lighting.

The exotic plants in the large flower bed at ground level have been replaced by some seedy looking palms. There may have been practical horticultural difficulties about the former plants but surely something better than the present lot could have been devised. There are still far too many badly written notices about. Most of these are near the bars and buffets.

The gardens round are coming on a treat, but there still seems to be far too much unadorned paving. It is nice to have adequate car parks really close to the building.

APPOINTMENT FOR KADLEIGH

Sergei Kadleigh, A.A.Dip. (Hons.), A.R.I.B.A., has been appointed Reader of Architecture at the Royal College of Art. I understand that he will conduct the basic



course of architecture of the College in the Faculty of Interior Design, of which Sir Hugh Casson is Professor. The Royal College of Art is thus, seeing that it does not teach budding architects, remarkably well equipped with distinguished architects.

GOODWINS COURT

My pictures show views of opposite sides of Goodwins Court, St. Martin's Lane; one side has been recently

reconstructed. I am told that the L.C.C. planning authorities stipulated that the facing material of the new work should harmonize with the opposite terrace. This is a pretty vague term and the result is not very satisfactory. I cannot help feeling that the interpretation of the L.C.C.'s wishes has not produced what was intended. All the same, it might have been much worse.

ABNER

NEWS OF THE WEEK

B.R.S. Architects Division

The Director of Building Research has announced the formation, as from August 1, 1953, of a separate Architects Division. Hitherto architects on the Station staff generally worked individually in the scientific and information divisions. While some will continue to work in this way, the remainder will form the nucleus of the new Division which is designed to conduct investigations of a predominantly architectural character and to carry out experimental building work incidental to the Station's other research requirements. Amongst the new Division's first commitments is the study of modular co-ordination and its implications for building design and construction.

Mr. William Allen, A.R.I.B.A., has been appointed Head of the Division and Mr. S. Meyrick, A.R.I.B.A., is to be Deputy Head. Mr. Allen will also be responsible for professional matters affecting the entire architectural staff of the Station except that of the Colonial Liaison Officer's section.

Aberdeen Building Week

AN Aberdeen Building Week Exhibition organized by the local building industry and its allied professions in association with the Local Authority and the Ministry of Works has been scheduled for the period October 9

to 17. The main purpose of the Exhibition is to further the education of those already in the industry, to interest those who intend to enter it, and to give the general public an insight into the work which is being carried out in the district.

The Exhibition will be housed in the MacRobert Hall, and a part of the Art Gallery, whilst practical demonstrations in training for the building industry will be carried out at the Trades College. Among the principal exhibits at the MacRobert Hall and the Art Gallery will be the many aspects of housing construction and new methods of maintenance; examples of materials used in building; powered tools and equipment; models and drawings showing local building schemes and town planning proposals; models and diagrams illustrating plumbing practice; and many features pertaining to the work of the architect, the Civil Engineer and the Quantity Surveyor.

On October 13 at 7.30 p.m. a Brains Trust will be staged in the New Lecture Room of Robert Gordon's Technical College under the Chairmanship of Councillor John Collins. The panel will answer questions on building matters.

The Exhibition will be open daily from 2 to 9 p.m. (Saturdays 11 a.m. to 9 p.m.). Admission free.

COMPETITION

School at Falmouth

The County Council propose to hold a limited competition for the design of a Secondary Modern School, estimated

to cost £184,000, and in consultation with the Royal Institute of British Architects have appointed Mr. Howard V. Lobb, C.B.E., F.R.I.B.A., Assessor to advise them on the conduct thereof.

Registered Architects willing to compete should send in their names to E. T. Verger, Clerk of the County Council, County Hall, Truro, Cornwall, by October 31, 1953, giving such information as they may think likely to advance their claims to be admitted to the competition.

From these names it is proposed to select a limited number to compete, each competitor receiving the sum of £350 for the preparation of his design.

It is expected that the competition conditions will be available early in November, and that a period of one month will be available in which competitors may raise any questions, the final design being submitted by the middle of March, 1954.

All applicants must be prepared to work to this programme and to agree to prepare the necessary working drawings to enable tenders to be received to allow a start to be made on the work during February, 1955.

ANNOUNCEMENT

Sergei Kadleigh, A.A. (Hons.) Dipl., A.R.I.B.A., has been appointed Reader in Architecture at Royal College of Art, and as from Michaelmas Day, September 29, 1953, will be conducting his practice from: c/o Royal College of Art, 23, Cromwell Road, London, S.W.7. Telephone Knightsbridge 1362 (temporary).

LONDON AIRPORT BUILDINGS FOR THE CENTRAL AREA

AT a Press Conference last week, Mr. A. T. Lennox-Boyd, Minister of Civil Aviation, made public the plans for buildings in the Central Terminal area of London Airport. The present stage of the development plan provides for three buildings which have been designed by Frederick Gibberd, F.R.I.B.A., M.T.P.I. These buildings are already under construction. Mr. Gibberd was appointed by the Minister of Civil Aviation in 1950. The designs have been approved by the Royal Fine Art Commission. The three new buildings are, a control building in the centre, a passenger handling building on the south-east face and an airline operation building with public amenities on the eastern apex of the diamond-shaped central terminal area. The central control building and the passenger handling building are illustrated on other pages of this issue. The third building will be published in next week's issue. The central terminal area is connected with the rest of the airport and with the Bath Road by the main access tunnel. This tunnel is 2,000 feet long and 86 feet wide. It contains two separate 20ft carriageways, two separate cycle tracks and two pedestrian paths.

The whole of the terminal area reserved for buildings and aprons covers 158 acres. It is bounded by an outer taxi-way enclosing on the north-eastern and south-eastern faces of the diamond, two extensive concrete aprons to allow for 34 aircraft stands. The construction of the three new buildings is under the supervision of the Director-General of Works, Air Ministry. The estimated completion dates are: Control Building—July 1955; South-east Face Passenger Handling Building—September 1955; Eastern Apex Building—January 1956.

Consulting Engineers are: Sir William Halcrow & Partners; G. H. Buckle & Partners and Ewbank & Partners. Quantity Surveyors are: Ryder Hunt & Partners (Central Building); E. C. Harris & Partners (South-East Face Building) and Franklin Andrews (Eastern Apex Building). The Steelwork Contractors are: Redpath Brown & Co. Ltd. The General Contractors are: Taylor Woodrow Construction Ltd.

A portion of the south-east face building should be opened in March 1955. The majority of the short-haul services will then be handled in the central area, including those transferred to London Airport from Northolt.

Other buildings for passenger accommodation, freight and other purposes are planned for the remaining sides of the diamond-shaped central area. When these further buildings are completed, the temporary terminal buildings alongside the Bath Road on the north boundary of the airport will be cleared away. For the time being and for some years after the buildings now under construction have been completed, the northern boundary buildings will still be required for long-distance traffic. Among these buildings are the present control tower, the familiar passenger handling buildings of temporary construction and airport and airline administration offices. These buildings are capable of little further extension and will shortly reach the limit of their capacity.

It is expected that by 1960 London Airport will handle twice as many aircraft as were handled by London Airport and Northolt together last year.

The estimated cost of the three buildings now under construction at London Airport is £3,500,000. Subways and tunnels have cost £1,750,000. The estimated expenditure by the Ministry of Civil Aviation on building works already completed and planned is £21,000,000, of which £15,000,000 approximately had been spent by March 31, 1953.

General view of the models of the three new buildings which can be identified from the terminal area plan on the facing page.





Elevation facing south end of access tunnel

The Central Control Building

Architect: FREDERICK GIBBERD

THE control building stands to the south of the centre of the inner terminal area facing the southern entrance to the main tunnel. From this position the upper portion of the tower will command an all-round view of the dual parallel runway system and its approaches and of the outer taxiway. All movements of aircraft approaching and departing from the airport and all movements of aircraft and motor vehicles on the airport movement area will be controlled from this building. The building will also contain the headquarters of airport management, aeronautical telecommunications, the medical centre, restaurants and welfare facilities for all staff employed in the central area as shown on the detailed plans on pps 355 to 357.

The Control Tower

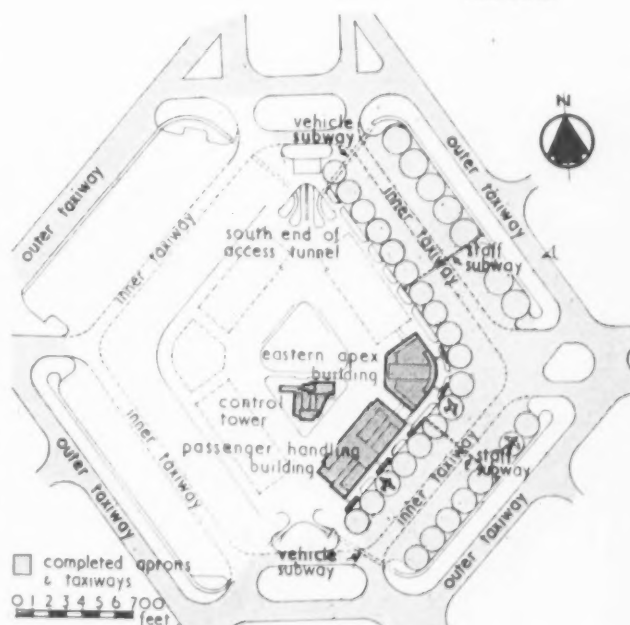
The air traffic control services will occupy the upper floors of the control tower and a glazed penthouse on the roof. The height of 122ft 6in was needed to give a view over the top of the buildings of the runways and of the outer taxiway. The shape of the tower was determined by a number of practical considerations. The more important of these were the need to provide the view required by air traffic control and the layout of technical equipment with an interconnecting vertical duct. Furthermore, the arrangement of the tower walls on varying planes at angles to each other is intended to minimize the interference which large flat surfaces are likely to cause to radio approach and landing aids.

A central services core extends to the full height of the tower and contains the lifts, ventilation trunking and the pneumatic tube and cable duct. Underneath all control rooms there will be a false floor in which cables and tubes can be run from the vertical duct to any position in the room thus ensuring flexibility in the layout and ease of maintenance of technical equipment.

The penthouse on the roof will be the aerodrome control room and from it an all-round view of the airport is obtained. The roof will be partly glazed to improve the view upwards from the control desks.

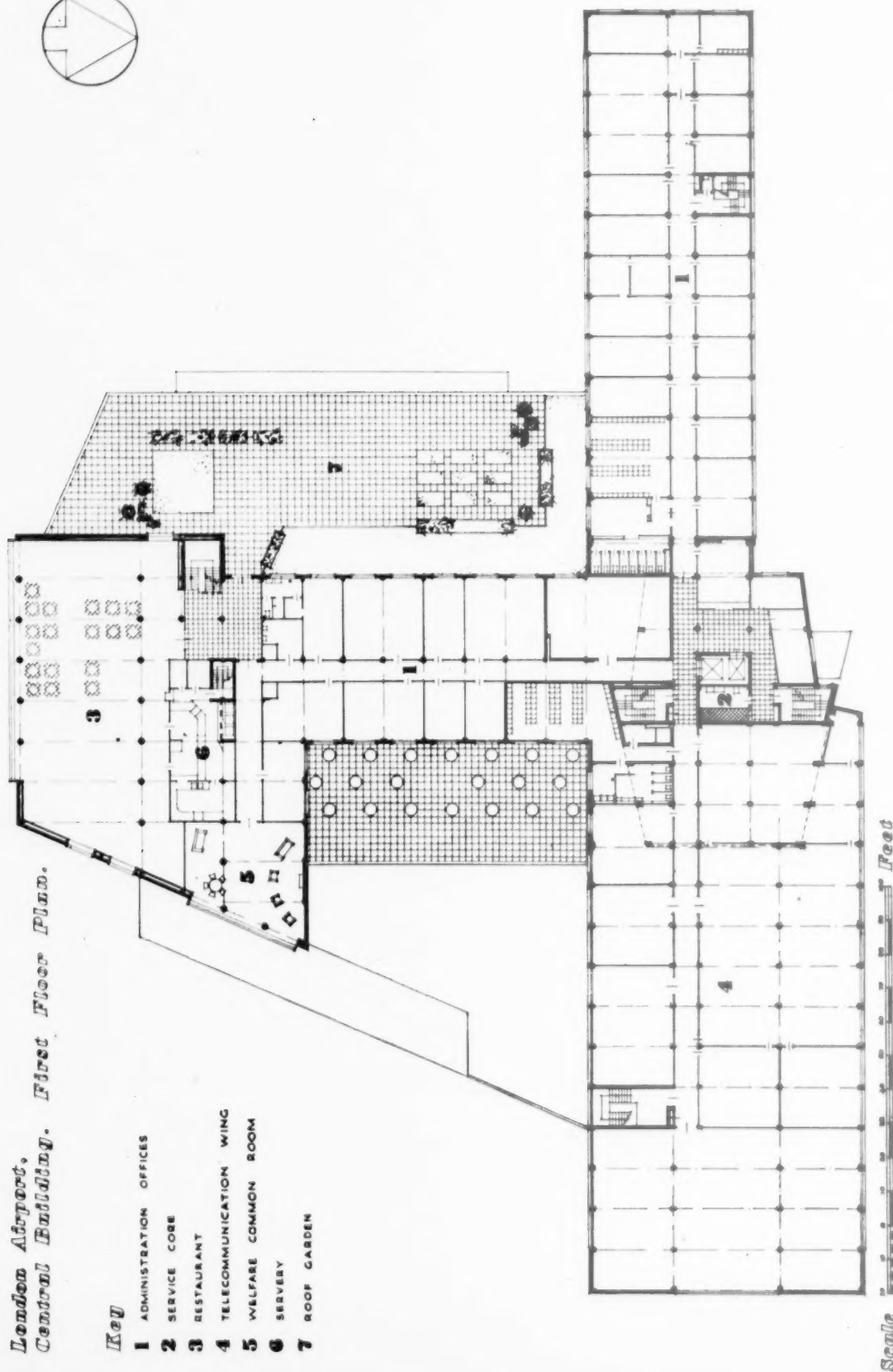
The height of the approach control room is to be 15ft in order to accommodate a control information panel ("tote" display) which will be placed against the back wall in the widest part of the room and with direct access to the vertical duct. The control room will be cantilevered out beyond the face of the tower and enclosed with glazing sloped to avoid reflection of the three remaining sides. A mezzanine gallery will run round the window line and will be in direct connection with the seventh floor. This will be arranged so that one half is enclosed by windows to form a balcony inside the room overlooking the control panel and the other half an external balcony overlooking the airport.

[Continued on page 367
Plans overleaf]



The diamond-shaped terminal area

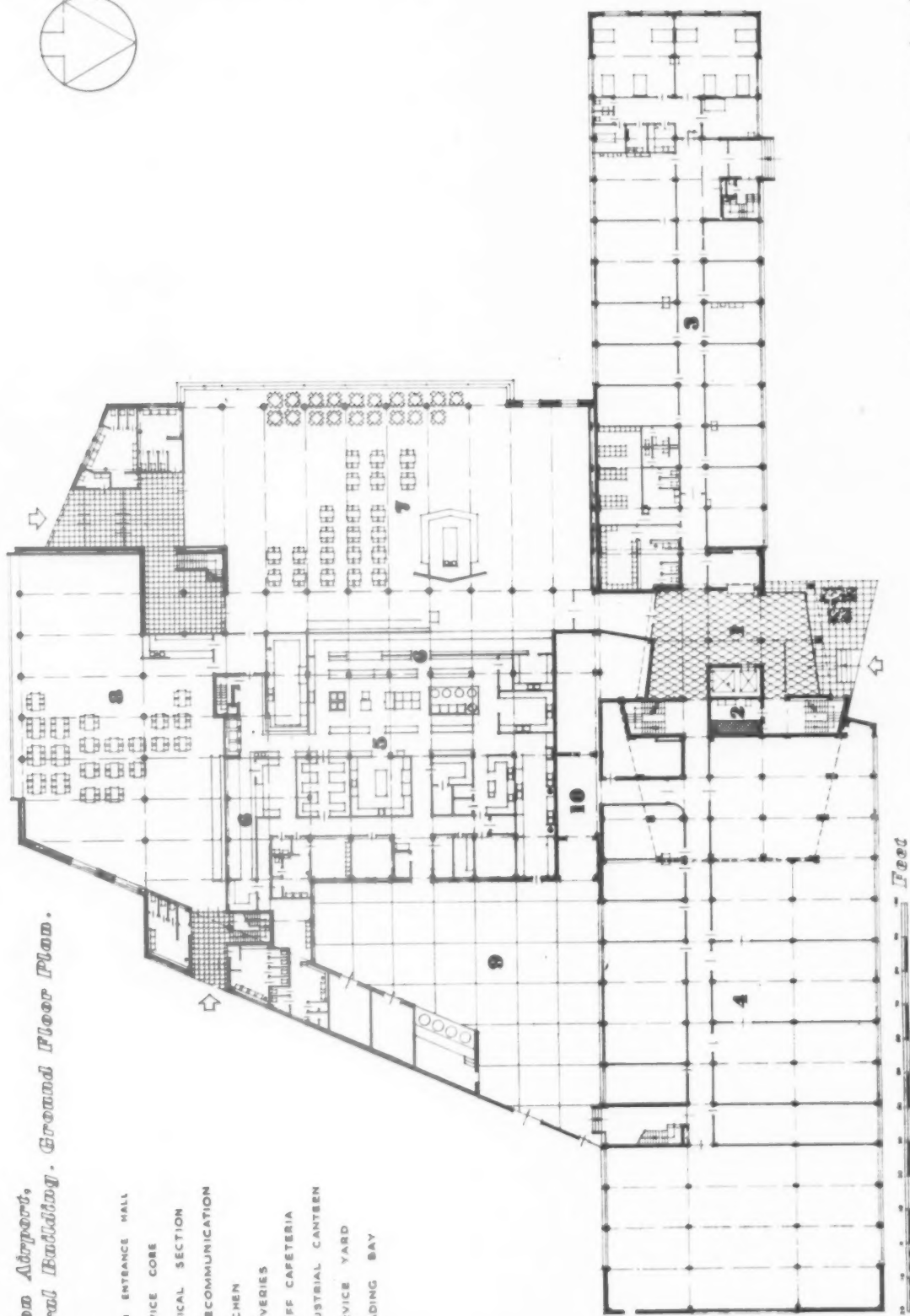




*London Airport,
Central Building. Ground Floor Plan.*

Key

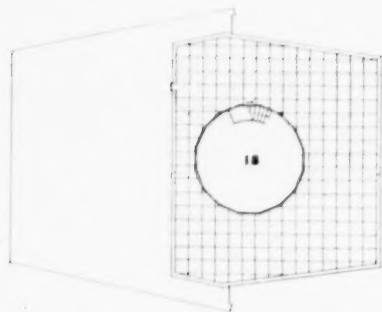
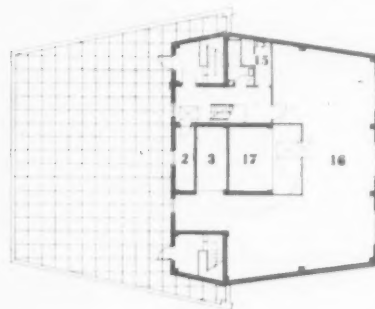
- 1** MAIN ENTRANCE HALL
- 2** SERVICE CORE
- 3** MEDICAL SECTION
- 4** TELECOMMUNICATION
- 5** KITCHEN
- 6** SERVERIES
- 7** STAFF CAFETERIA
- 8** INDUSTRIAL CANTEN
- 9** SERVICE YARD
- 10** LOADING BAY



Scale

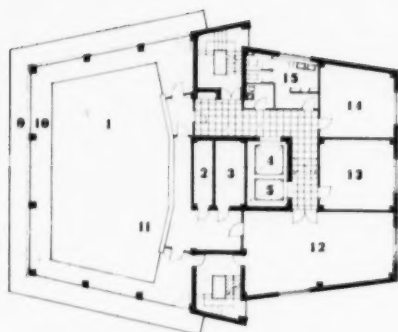
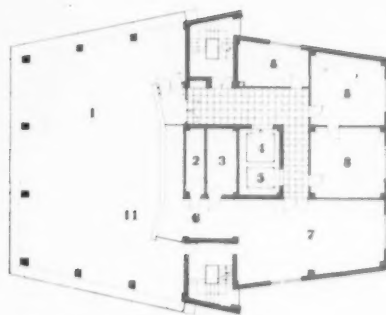
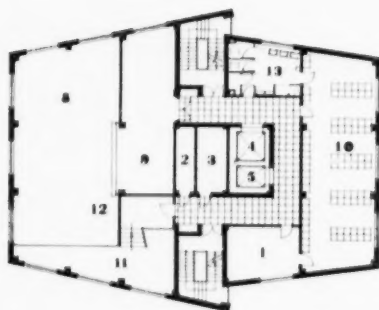
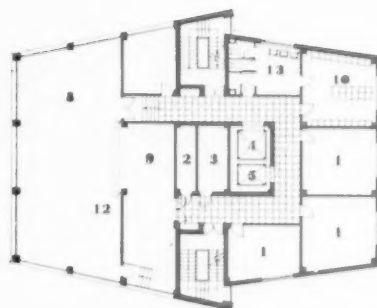
Feet

plans continued overleaf

9TH FLOOR8TH FLOOR

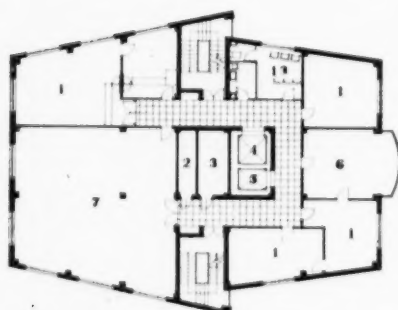
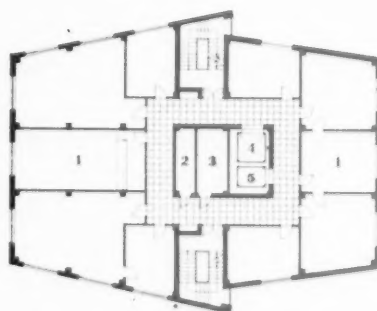
Key

- 1 APPROX. CONTROL ROOM
- 2 TABLE BUILT
- 3 VENTILATION BUILT
- 4 ROOMY LIFT
- 5 PASSENGER LIFT
- 6 RADAR DISPLAY
- 7 WIRELESS TELEGRAPHY
- 8 OFFICES
- 9 EXTERNAL BALCONY
- 10 GALLERY
- 11 TOTE DISPLAY
- 12 TOTE EQUIPMENT
- 13 LIBRARY
- 14 WALL REST ROOM
- 15 LAVATORIES
- 16 VENTILATION PLANT AND TANKS
- 17 LIFT MOTOR ROOM
- 18 APPROX. CONTROL ROOM

7TH FLOOR6TH FLOOR5TH FLOOR4TH FLOOR

Key

- 1 ADMINISTRATION OFFICES
- 2 EARLY BUILT
- 3 VENTILATION BUILT
- 4 ROOMY LIFT
- 5 PASSENGER LIFT
- 6 COMMANDER'S OFFICE
- 7 CONFERENCE ROOM
- 8 AIRCRAFT MOVEMENT CONTROL ROOM
- 9 EQUIPMENT
- 10 LIBRARY
- 11 GALLERY
- 12 WIRELESS BUREAU
- 13 LAVATORIES

3RD FLOOR2ND FLOOR

London Airport, Central Building.

Scale: 1/4" = 1'-0"

Continued on page 367



North Street front

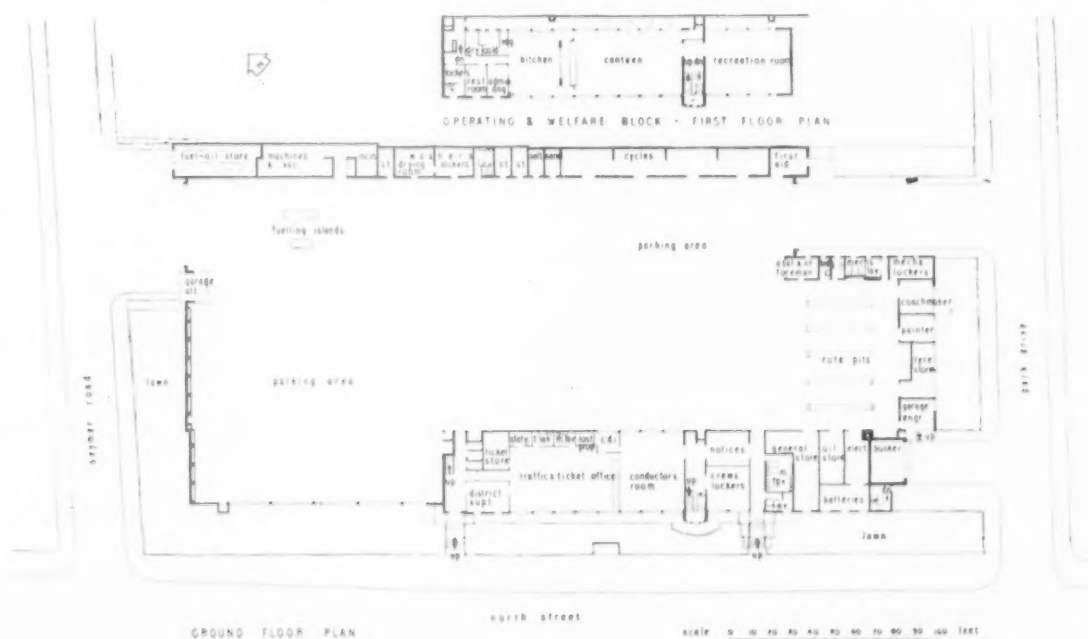
New Garage, Romford, for London Transport

THOMAS BILBOW, architect to the Executive

assistant architects: C. S. Boughton, E. A. Taber and S. Hawkins

ROMFORD (North Street) garage, the latest to be completed under London Transport's post-war programme, was brought into use on August 12. Occupying a two-acre site the new building provides accommodation for the parking and day-to-day maintenance of 115 buses of the Central Road Services fleet, and incorporates an operating and welfare block containing offices, canteen and recreation room. No facilities for heavy maintenance are provided; from an engineering point of view the garage will be subsidiary to Hornchurch, where the appropriate installation is now being added.

The building is of steel-frame construction with brick facings. The greater part is taken up by the parking area, which is some 285 x 120 feet, under a single-span steel truss and asbestos-cement roof. The roofing over the remaining accommo-



dation is of flat precast concrete units covered with vermiculite insulation and asphalt.

To avoid congesting North Street, a busy thoroughfare, one-way operation has been arranged so that buses enter from Seymour Road and leave by Park Drive. The interior working of the garage is to London Transport's post-war pattern; a bus coming off the road passes to the first position in a servicing line for vacuum-cleaning and refuelling, then to the second position for exterior cleaning by automatic washing machine, and on to its allotted parking place. A roof-washing machine of London Transport's own design is to be installed.

At the far end of the parking area are five pits. These are enclosed on three sides by the various engineering shops and stores, and are covered over, when not in use at night, to provide additional parking space. All pits have fluorescent lighting and floor-level heating.

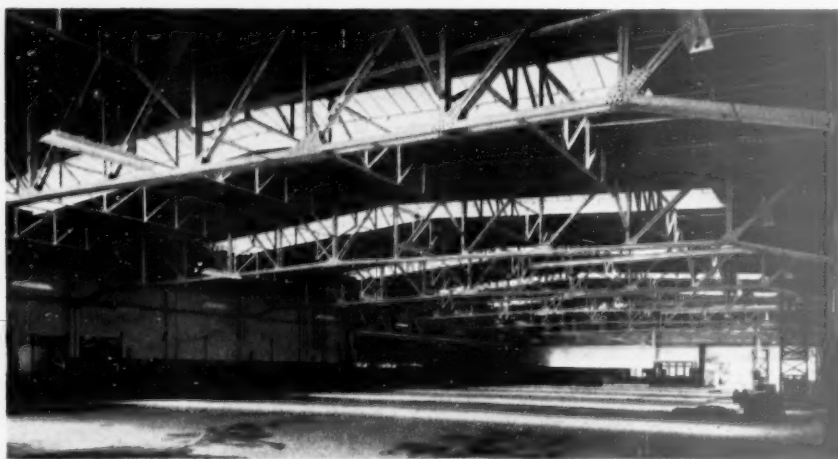
Compressed air is led to all pits and a ring-main provided, with draw-off points throughout the parking area, shops, etc. So that engines can be run in the pit area without contaminating the air, exhaust fumes are drawn off by

extract-fan to the atmosphere. Additional vacuum-cleaning facilities are provided in this area.

The entrance to the operating and welfare block forms a hall for the display of schedules, duty rosters and general information, and leads into the conductors' room, where tables are provided for use in making up waybills and checking tickets and cash before paying-in through a specially designed armour-plate glass screen to the combined cash and ticket office. Offices for the District Superintendent and Chief Depot Inspector are provided in this part of the building, which also houses staff locker rooms.

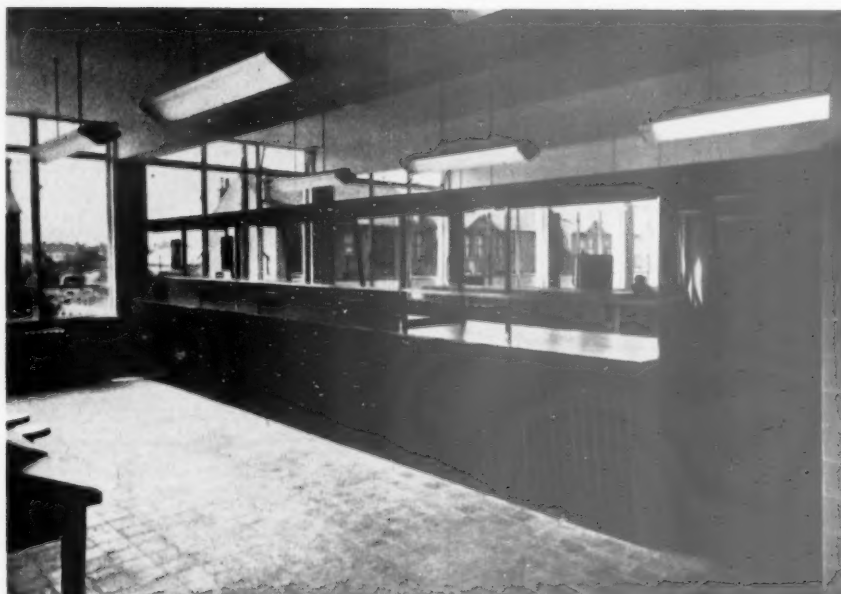
A staircase from the hall leads to a canteen seating 120 persons and a small dining room for administrative staff. The kitchen is fitted with up-to-date equipment, including built-in cold room, hot counter, electric wash-up machine, etc.

The Structural Engineers were A. V. Bond, A.M.I.Struct.E. and H. Carter, A.M.INST.C.E., M.I.Struct.E., J. H. F. Read, B.S.C., was consultant for Heating and Ventilation. The General Contractors were F. Troy & Co. Ltd., Structural steelwork was by Cargo Fleet Iron Co. Ltd.



General view of Parking area showing roof trusses.

Conductor's Room and traffic and ticket office.



NEW
GARAGE
FOR
LONDON
TRANSPORT



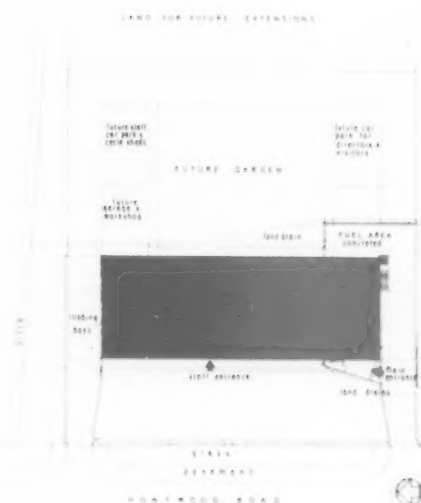
Front elevation and main entrance

FACTORY AT BASILDON

for Nufloor Ltd.

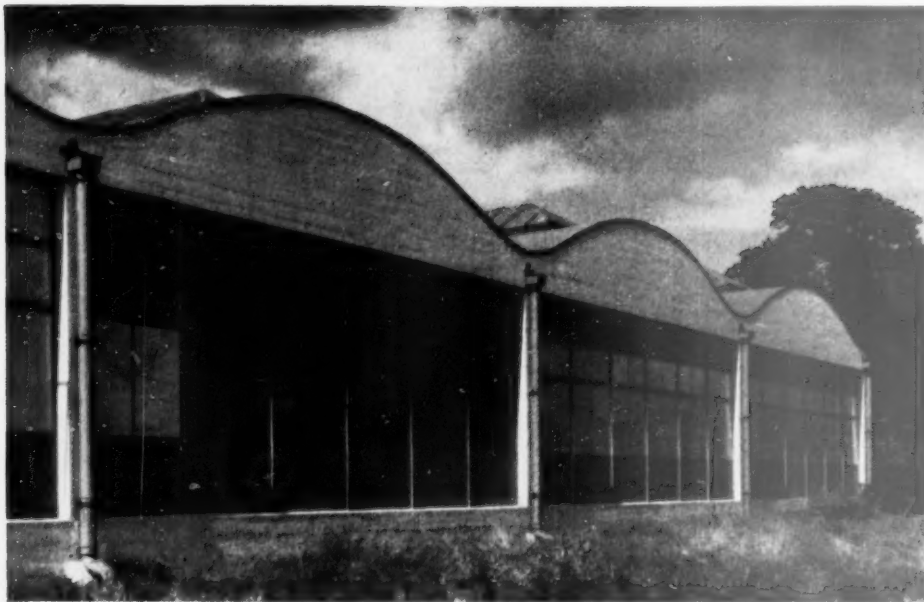
architect : CLIFFORD STRANGE

assistant-in-charge : R. J. Mackay

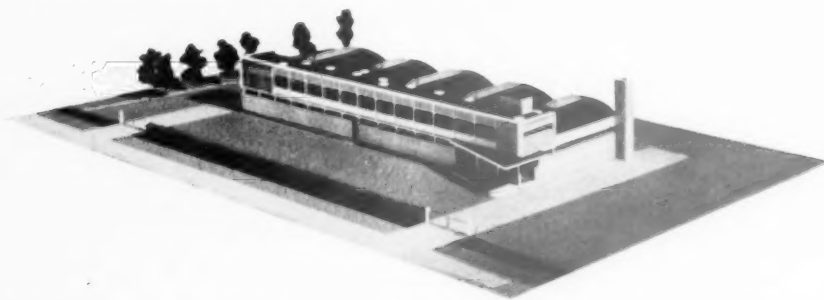


BLOCK PLAN

CLIENT'S requirements were for a single-storey factory in the main, which would be capable of rapid and economical expansion. At the same time, it was desired, in the light of changing methods of production, to have as large an unobstructed area for the actual working space of the factory as possible. Various studies were made of different types of construction, including light-weight prefabricated steel frame and panel, which owing to the steel restrictions had to be dropped. The decision was finally made in favour of barrel vault construction, with its large spans and minimum of supports. It was also decided that the main frontage should consist of a two-storey office structure providing Stores, Staff Rooms, Lavatories and Administrative Offices. The main entrance to the Administrative Offices is at the south-west corner of the building with a smaller entrance farther to the north for the staff. A loading dock for goods is provided on the north side of the building and access to this is by means of a service roadway from the main road. The



Windows and barrel vaults of Engineering and Chemical Shop



NUFLOOR FACTORY, BASILDON

Model of factory

main factory floor is divided into engineering and chemical sections and is separated from one another by means of a fireproof wall.

Site

The site is situated on the industrial estate of the Basildon Development Corporation and adjoins the London-Southend arterial road. The site is about 200ft frontage by 280ft deep, and slopes gradually from west to east. Approximately a third of the site has been built upon in this first stage and there is provision for extensions in the near future.

Construction

The front part of the building is constructed with a monolithic reinforced concrete frame, floor and roof slabs. Barrel vault roofing on reinforced concrete stanchions was used over the factory area. Staircases were formed of precast reinforced concrete steps with wrought-iron balusters and mahogany handrails. 11in brick cavity wall construction on ground beams were used for main-wall infilling. Partitions on the ground floor are brick and the first

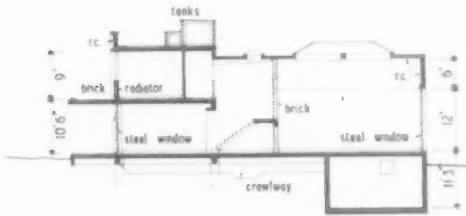
floor lightweight slabs. Windows, external doors, roof lights and glazed metal screens are steel and the windows have pressed-steel sills.

Finishes

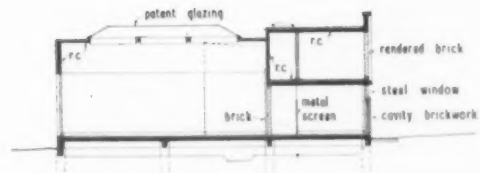
All exposed concrete members externally are smooth finished and painted with Stic B. Flat roofs are covered with vermiculite screed and rock asphalte and the barrel vaults with vermiculite screed and two-ply bituminous sheeting. Underside of barrel vaults are treated with vermiculite spray to prevent condensation. Facing bricks are 2in straw coloured wirecuts with raked lime pointing, the remainder of the external brickwork is rendered with coloured Tyrolean finished cement rendering in coloured panels of red, light green and grey.

The first-floor window breasts on the main elevation are finished with yellow glazed tiles. Office floors have been covered with different hardwood blocks to each office to serve as examples to show clients' customers, these are:—Gurgan, Jarrah, Teak, Walnut, Oak, Maple, Afrormosia, Beech and Podo. The main entrance hall has a terrazzo

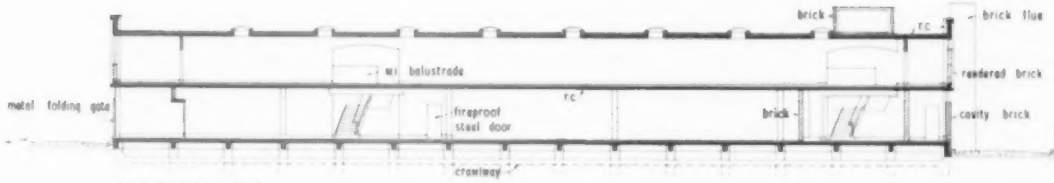
[Continued on page 365]



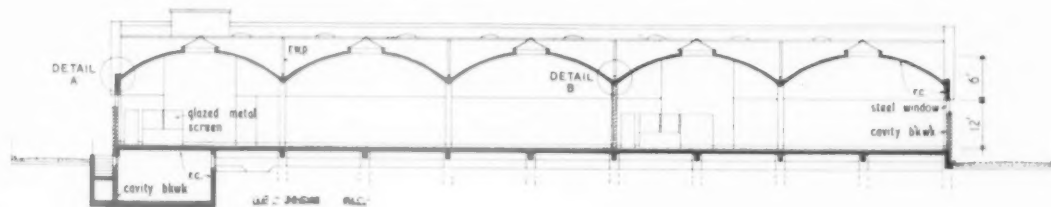
SECTION B.B.



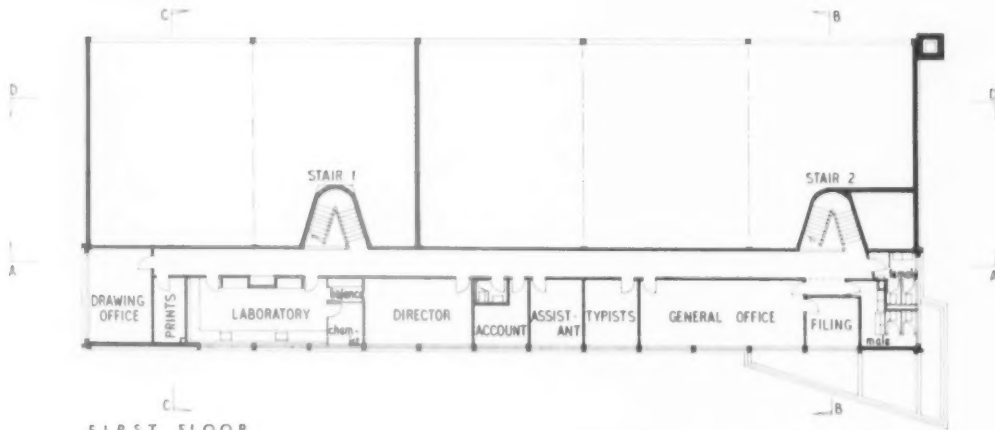
SECTION C.C.



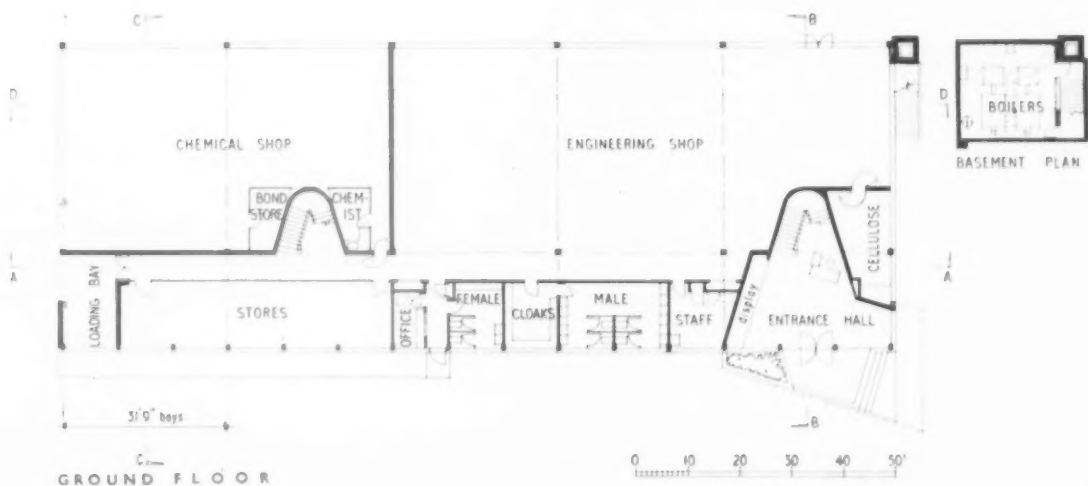
SECTION A.A.



SECTION D.D.



FIRST FLOOR



GROUND FLOOR



BASEMENT PLAN



NUFLOOR FACTORY, BASILDON

Continued from page 362

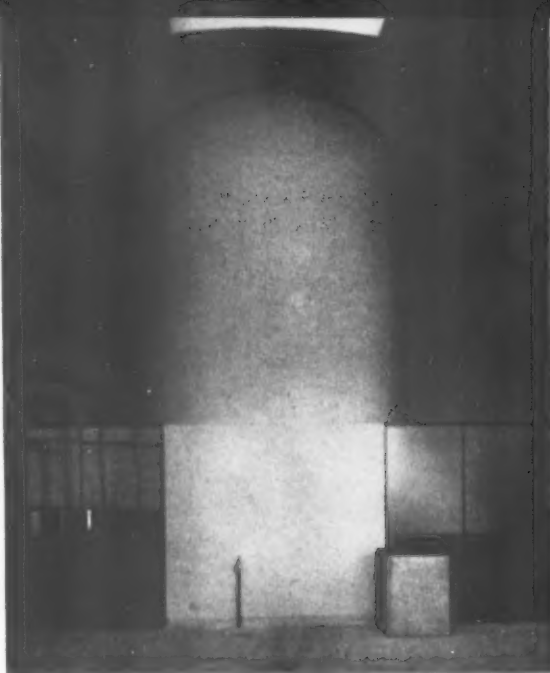
floor with narrow light green bands on a cream background. The precast concrete treads of the staircase from the entrance hall are finished with cream terrazzo with green non-slip insets. The finish of the floor of the main factory area is non-dusting granolithic and this also applies to Stores, Stores corridor and Load dock. The floors of the Staff Room, Cloak Rooms, Staff Entrance and Lavatories are cement tiles of red, pale green and grey. Walls are generally distempered and joinery and metalwork painted.

Internally, the colours generally adopted were:—Factory areas—pale green, the back of the staircase in the Chemical shop being picked up in primrose, Cellulose Shop and Timekeeper's Office—grey, Loading Bay—Terra-cotta, Staff Lavatories—cream, and Director's lavatory—light green, Entrance Hall and staircase—green cement glaze, First floor corridor—primrose, Offices generally—light cream, Director's Office—green, Drawing Office and Print Room—peach, Laboratory, Chief Chemist and Balance Room—Cement grey with teak fittings.

Services

The ground floor slab is suspended above ground level thereby providing a crawl-way over the entire site to house all services. Access to this is through the Boiler House in the basement. One boiler is provided but provision is made for a further boiler when extensions are proceeded with.

Heating is by low-pressure hot water, supplying space heaters in the factory, flush panel recessed radiators in the offices and Classic radiators elsewhere. Hot water is supplied through the calorifier which has an immersion heater for summer use. The electrical installation mains are taken from the main switch room adjoining the Boiler House. Ring mains are provided beneath the ground floor slab to enable machines to be placed and connected in almost any position.



Top: One of the circular stairwells from the Engineering Shop.

Above: Interior view of a Shop.

Left: The entrance hall and staircase showing Telephone Operator's booth.

[Continued overleaf]

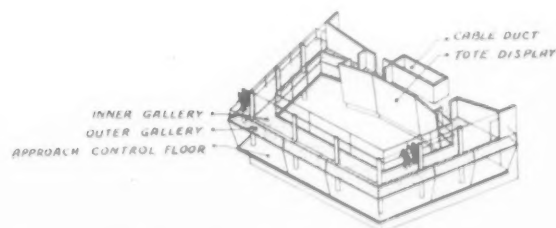
CENTRAL CONTROL BUILDING, LONDON AIRPORT

Continued from page 355]

All aircraft and motor vehicles on the movement area will ultimately be controlled from this room which will be immediately below the approach control room and be of the same shape. The ground movement control room is designed to take a mimic diagram of the aerodrome on the wall adjacent to the vertical duct. The windows on three sides will also be sloped to avoid reflection.

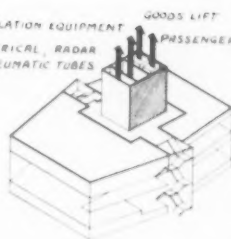
The east wing of the tower will contain aeronautical telecommunications staff and equipment related to the control of aircraft.

The medical centre is in the west wing of the tower. It will be the headquarters of the medical services of the airport and will be fully equipped as a casualty clearing station. Aircrew licence examinations will also be carried out there.

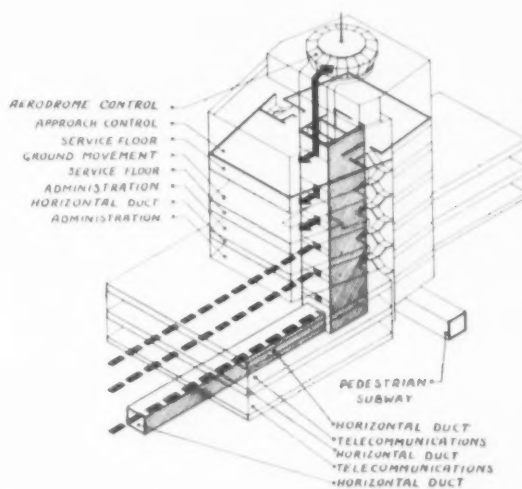


Approach Control Room

VENTILATION EQUIPMENT
ELECTRICAL, RADAR
PNEUMATIC TUBES



Services Core



Vertical and Horizontal Duct System

The Central Control Building





This view of the east face passenger handling building shows the bridges and ramps on the air-side of the building. Buses can pass under the bridges to take passengers to the outer aircraft stands.

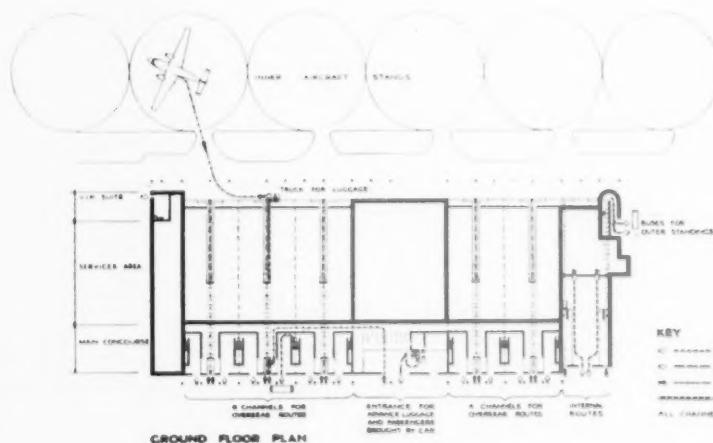
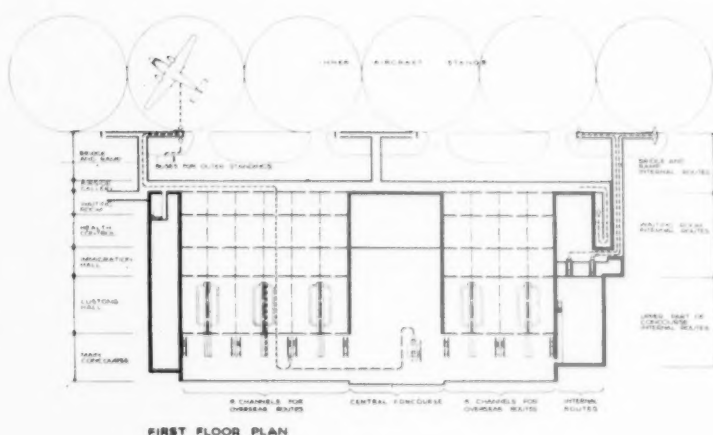
South-East Face Passenger Handling Building

architect: FREDERICK GIBBERD

THE main function of the building is to provide for the handling of incoming and outgoing passengers and their luggage. The building has to deal with three kinds of passenger: (a) Passengers travelling on overseas routes subject to clearance through Customs, Health and Immigration formalities. (b) Passengers travelling from one country to another via London Airport who do not officially enter this country and do not pass the Customs, Health and Immigration examination. (c) Passengers travelling on internal services within the United Kingdom or on other services not requiring Customs, Health and Immigration examination. In addition, the building provides facilities for spectators' entertainment, storage of bonded spare parts, baggage stores and minor maintenance work on aircraft. Details of the accommodation and relationship of the main elements are shown in the plans pp. 370-373.

The diagrams on this page and the isometric view opposite illustrate the functioning of the building and the movement of passengers and luggage to and from aircraft.

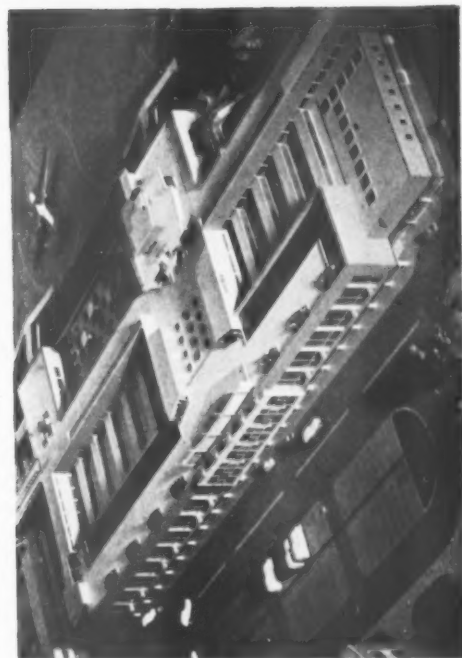
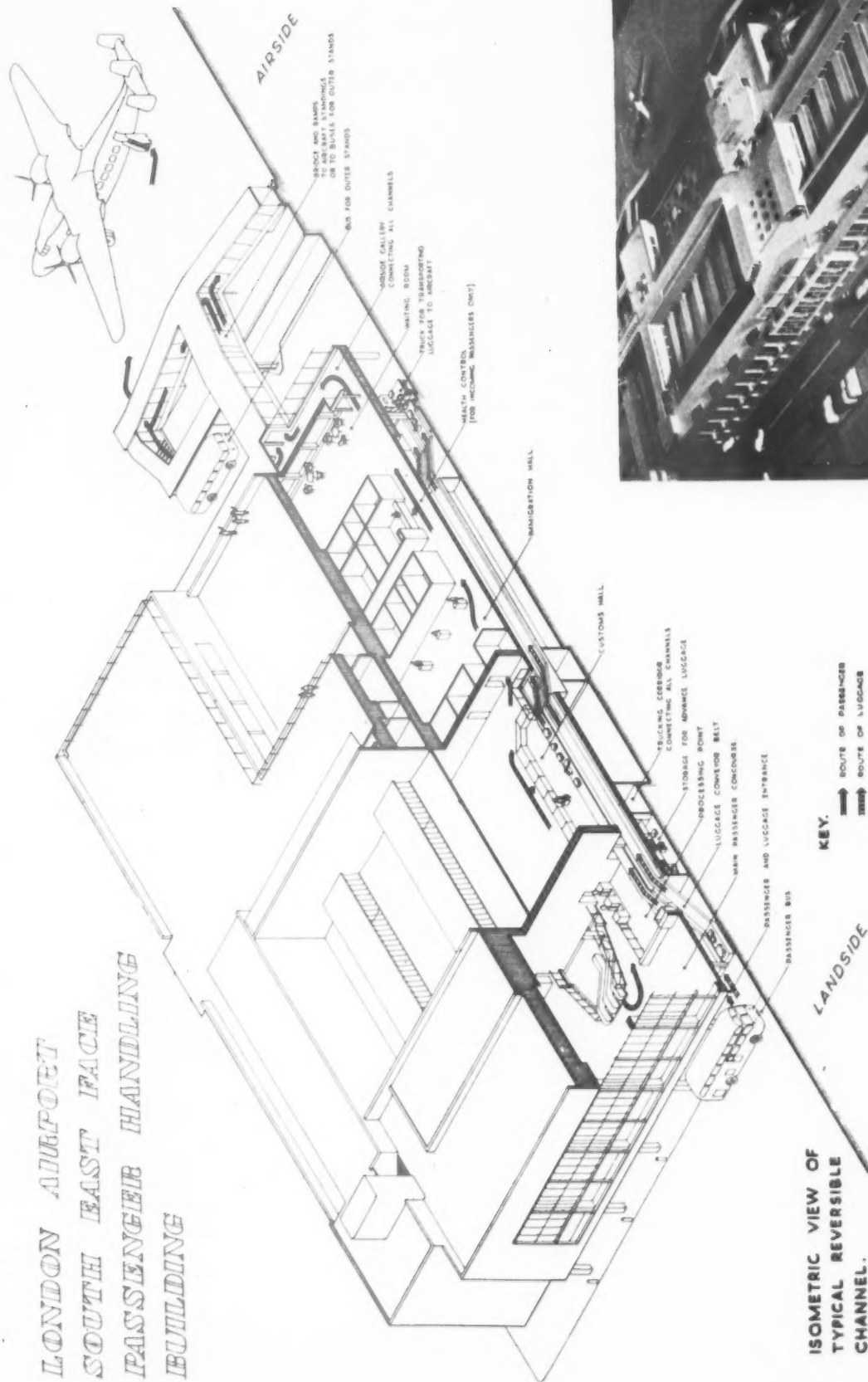
The Continental section of the building is planned at first-floor level as a series of transverse bands, containing respectively the Concourse, Customs, Immigration, Health and Waiting Rooms. Ten parallel passenger handling channels cut through these bands at right angles between the land-side and the air-side of the building. Each channel is served by a baggage conveyor belt running beneath the first floor except in the Customs Hall where the baggage is brought up for inspection. Each channel is completely reversible and thus capable of handling either inward- or outward-bound passengers.



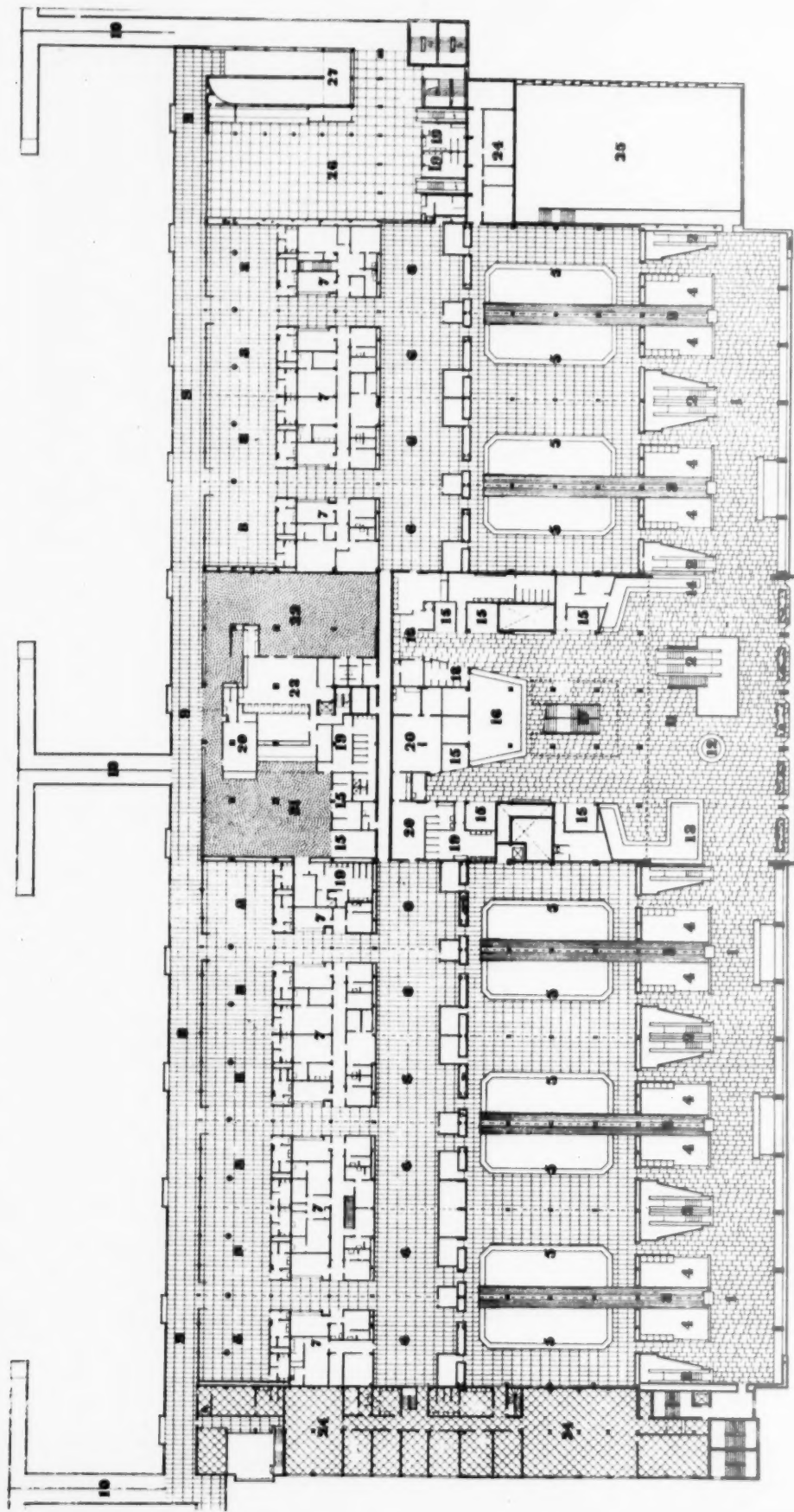
Diagrammatic plans of passenger and luggage flow channels.

(Continued on p. 374)

LONDON AIRPORT SOUTH EAST FACE PASSENGER HANDLING BUILDING



This view shows the roof terraces and landside elevation of the south-east face passenger handling building.



1. MAIN CONCOURSE
2. ESCALATORS
3. CONVEYOR BELTS
4. PROCESSING POINTS
5. CUSTOMS HALL
6. IMMIGRATION HALL
7. HEALTH CONTROL
8. WAITING ROOMS
9. AIRSIDE GALLERY
10. BRIDGE AND RAMPS TO AIRCRAFT STANDS

11. CENTRE CONCOURSE
12. INFORMATION BUREAU
13. AIRLINE COMPANIES' COUNTERS
14. BUFFET
15. SHOPS
16. P.O., CABLES, CAR HIRE, ETC.
17. STAIRCASE TO BALCONY LOUNGE
18. TELEPHONES
19. LAVATORIES
20. NURSERY

21. TRANSIT PASSENGERS' LOUNGE
22. TRANSIT PASSENGERS' RESTAURANT
23. SERVING
24. OFFICERS
25. UPPER PART OF INTERNAL SERVICES
26. INTERNAL SERVICES WAITING ROOM
27. RAMP DOWN TO BUSES FOR THE OUTER AIRCRAFT STANDS

FIRST FLOOR PLAN

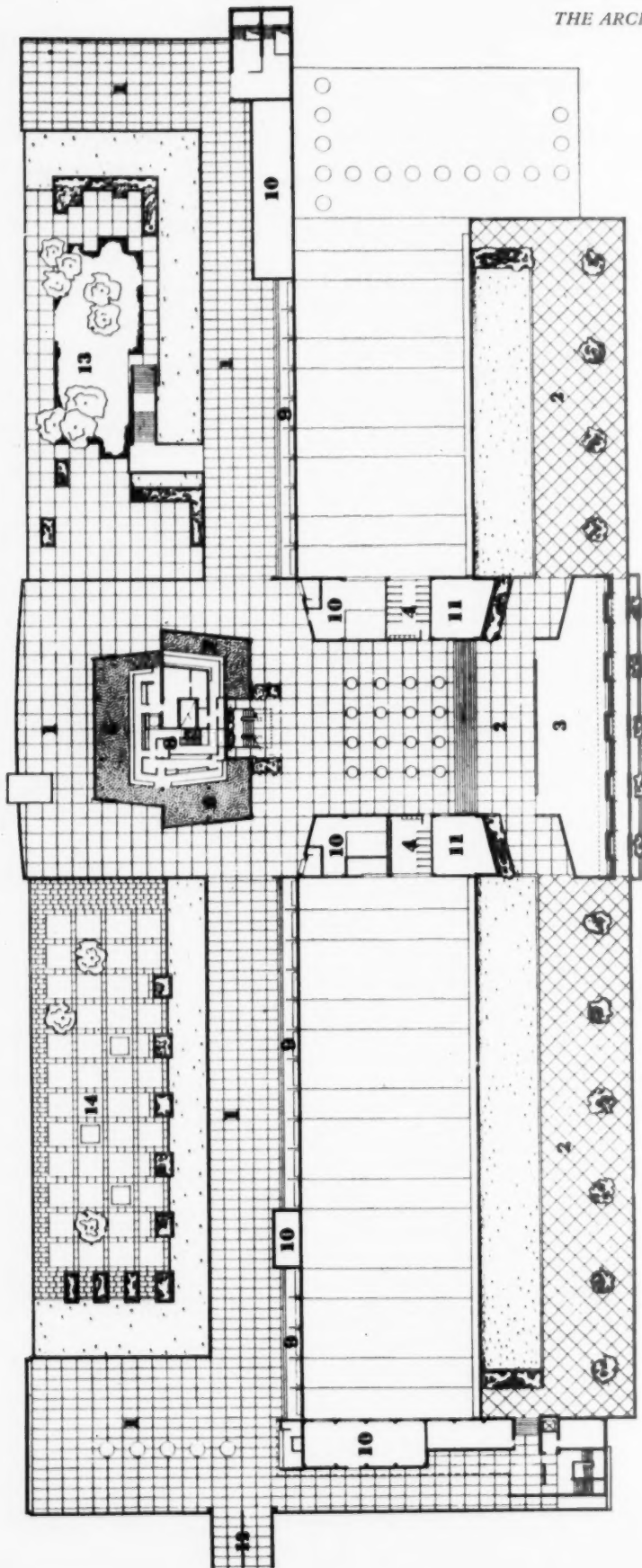
LONDON AIRPORT SOUTH-EAST FACE PASSENGER HANDLING BUILDING



1. PASSENGER ENTRANCE HALLS TO CHANNELS
2. CENTRAL PASSENGER ENTRANCE HALL (PASSENGERS IN ADVANCE AND BY OWN TRANSPORT)
3. LEFT LUGGAGE
4. ADVANCE LUGGAGE
5. ESCALATORS TO MAIN CONCOURSE
6. LUGGAGE CONVEYOR BELTS
7. BINS FOR ADVANCE LUGGAGE
8. LUGGAGE TRUCKING CORRIDOR
9. BUS DRIVERS' COMMON ROOM
10. STORES
11. HEATING, VENTILATION AND ELECTRICAL PLANT ROOMS
12. AIRCRAFT EQUIPMENT STORES
13. SERVICE CORRIDOR
14. BONDED STORE
15. CONTROL CENTRE
16. KITCHEN FOR PREPARATION OF MEALS IN AIRCRAFT (B.E.A.)
17. KITCHEN FOR PREPARATION OF MEALS FOR RESTAURANTS, ETC.
18. OUTSIDE STAFF LOCKERS AND DRYING ROOMS, ETC.
19. OUTSIDE STAFF COMMON ROOMS
20. OFFICES
21. V.I.P.'S RECEPTION SUITE
22. CONCOURSE FOR SERVICES NOT SUBJECT TO CUSTOMS CONTROL
23. STAFF CANTEN
24. LUGGAGE LOADING BANK
25. SERVICE ROAD
26. APRON CIRCULATION ROAD
27. INNER AIRCRAFT STANDS
28. BRIDGE AND RAMPS FROM FIRST FLOOR TO AIRCRAFT STANDS
29. LAYBY FOR BUSES TO OUTER AIRCRAFT STANDS
30. RAMP FROM AIRSIDE GALLERY FOR BUSES TO STANDS

Scale: approx. 60' = 1" see page 372

GROUND FLOOR PLAN

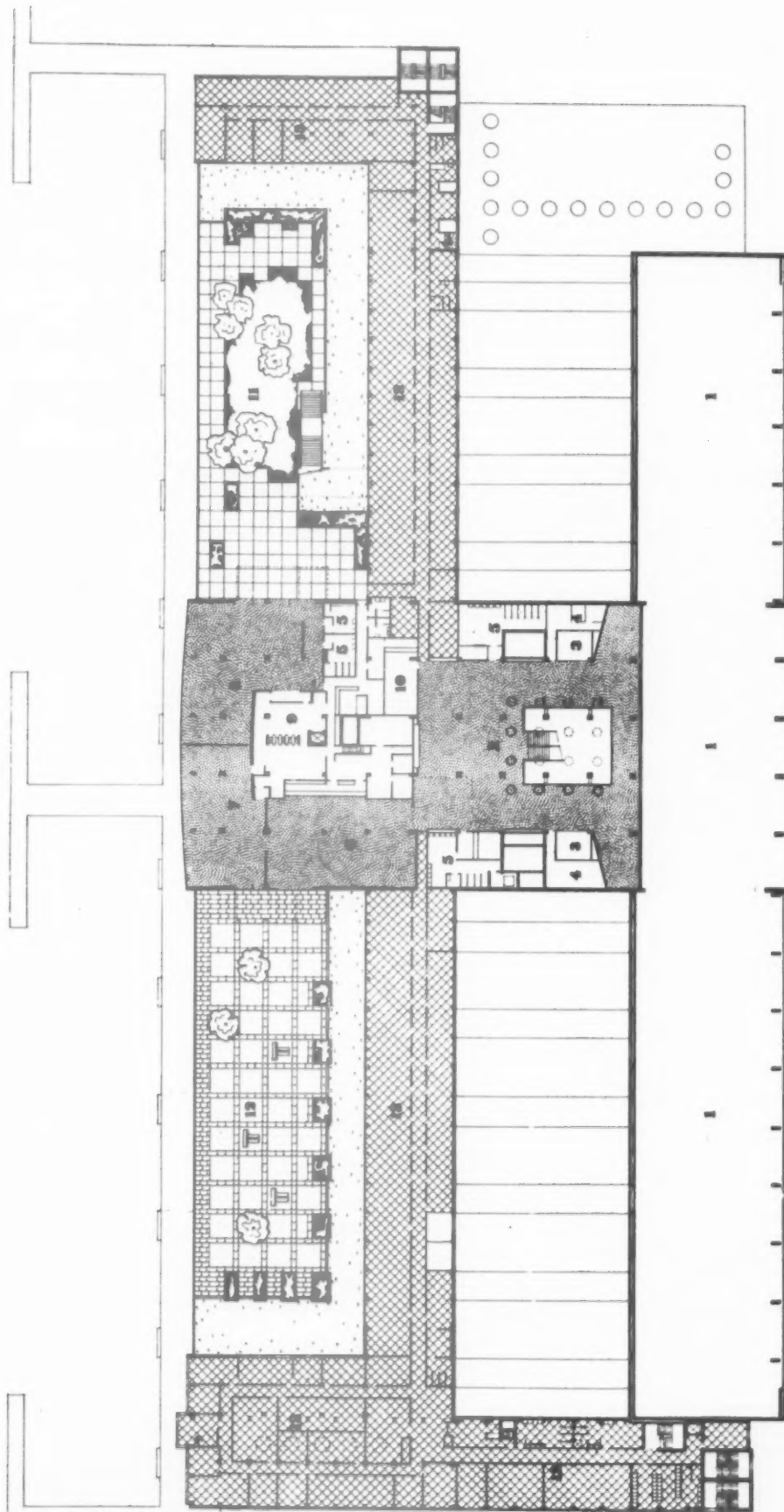


- | | | |
|-------------------------------|--|-------------------------------------|
| [1. SPECTATORS' ROOF TERRACES | 6. TEA BAR | 11. TANK ROOMS |
| 2. SPECTATORS' ROOF GARDENS | 7. LICENSED BAR | 12. BRIDGE TO EASTERN APEX BUILDING |
| 3. CHILDREN'S PLAYGROUND | 8. SERVERIES | 13. BEER GARDEN |
| [4. LAVATORIES | 9. RAISED COVERED SEATS FOR SPECTATORS | 14. ROOF GARDEN (WAVING BASE) |
| 5. CAFETERIA | 10. VENTILATION PLANT ROOMS | |



SCALE 1" = 20' 0" FEET

THIRD FLOOR PLAN, ROOF GARDEN



- | | | |
|----------------------------|---------------------------|-------------------------------|
| 1. UPPER PART OF CONCOURSE | 6. LOUNGE AND BUFFET | 11. BEER GARDEN |
| 2. BALCONY LOUNGE | 7. RESTAURANT | 12. ROOF GARDEN (WAVING BASE) |
| 3. SHOPS | 8. SPECTATORS' RESTAURANT | 13. OFFICES |
| 4. HAIRDRESSERS | 9. SERVING | |
| 5. LAVATORIES | 10. STAFF SNACK BAR | |

SECOND FLOOR PLAN

SOUTH-EAST FACE PASSENGER HANDLING BUILDING LONDON AIRPORT

continued from page 368

A Customs barrier which the general public cannot pass stretches the whole length of the building.

Transit passengers have their own self-contained suite on the air-side of the Customs barrier.

An air-side gallery runs the full length of the building connecting all channels and providing a link with the transit suite and the adjacent eastern apex building. From this gallery foot bridges and ramps lead down to the

apron. The gallery will eventually link with a similar gallery serving the adjoining apron on the north-east face.

Apart from the entrance halls the ground floor provides accommodation for technical staff, technical supplies and equipment, bonded stores and luggage warehouses.

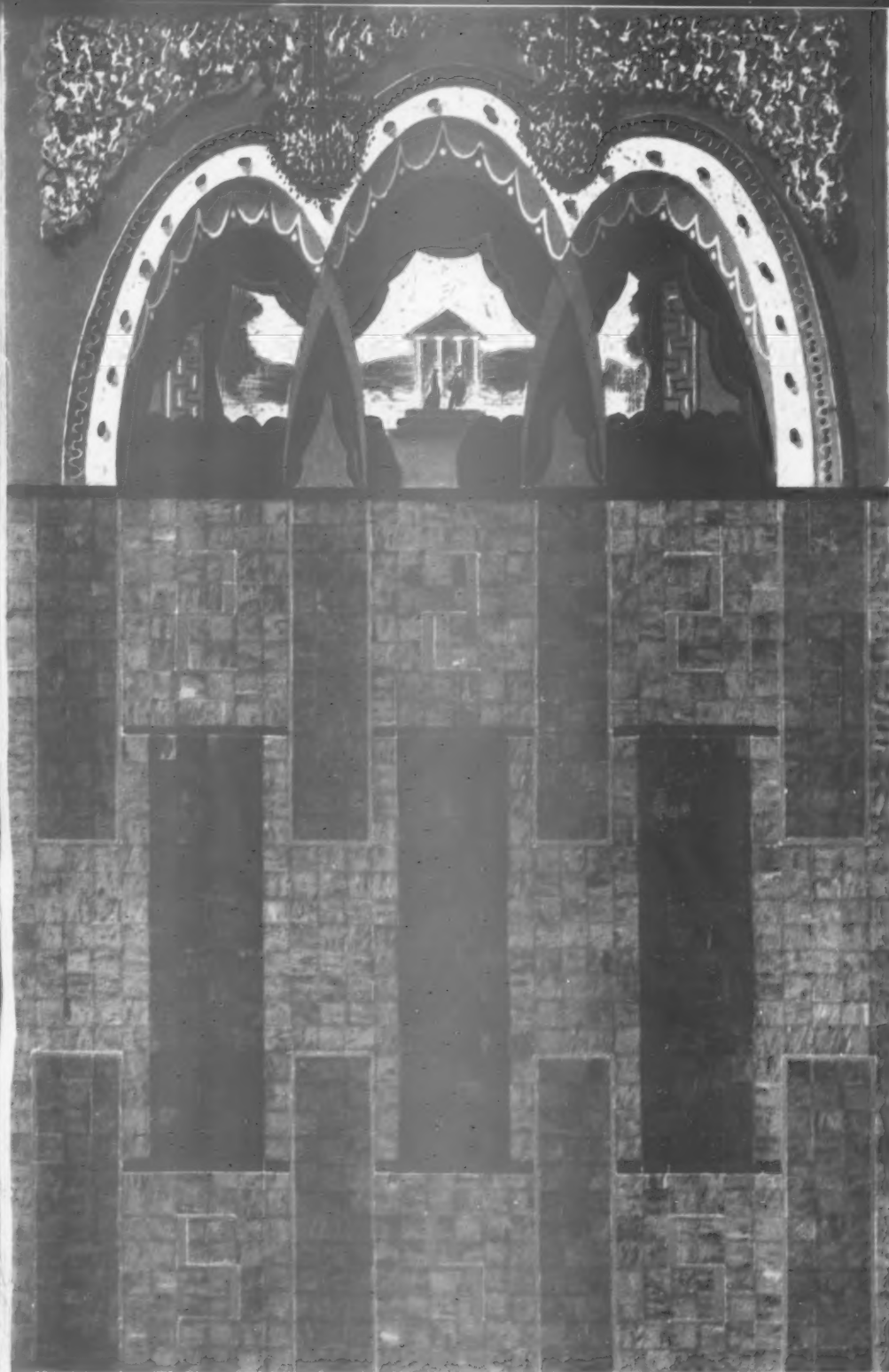
Internal Services

Passengers travelling on internal services or other services not subject to Customs, Immigration or Health examination are accommodated in a

separate section at the southern end of the building. A concourse with reception and despatch counters is at ground floor level. A waiting room at first floor level is connected to the concourse by escalators leading to an extension of the air-side gallery, and thence by bridge and ramp to the apron. In the absence of control formalities two handling channels suffice, one inward and one outward. There is no connection on the air-side with other channels used by passengers subject to Customs and other controls.

The Eastern Apex Building is sited midway between the two terminal aprons on the north-east and south-east faces of the central area. Pictured below is the model of this building which will be illustrated in next week's issue.





THEATRE FOYER, by R. Myerscough Walker

We now offer **MARLEYFLEX** floor tiles in the new 'COLORTONE' range with the confidence that the aesthetic aspect of floor tiling has been studied with more thoroughness than has hitherto obtained



The Marley Tile Company Ltd., Riverhead, Sevenoaks, Kent. Tel.: Sevenoaks 2251
Scotland: Bishopbriggs 1093 Wales: Penrdd 376 N. Ireland: Belfast 2447 Eire: Dublin 31794

MARLEY

The Sensitive Needle

The line drawn between any two complementary colours on the colour circle gives in effect a needle or beam which may be regarded as being sensitive in the way that a compass needle is sensitive. In short, the needle tends to hover on its central pivot in the way that any electrical needle does and to quiver around the points adjacent to it. This analogy will make clear why it is possible on the new Marley system of colour co-ordination to choose harmonies of either parent colour with a certain amount of ease. The scarlet and blue-green needle for instance would tend to move about its central axis and the scarlet end of the needle would hover around the reds and purples. The blue-green end of the needle would tend to hover around the green and the blue. In this way the designer would quickly realise that he has a choice of colours as harmonies covered by the restless movement of the needle around its axis and he is aware of the colours on either side of the needle which would give him an enlarged choice of colour range without departing from the best principles of colour mixture. It will be seen later in this series of announcements how the entirely new range of Marley colours covers the whole colour circle in such a way that the designer can point the needle to most colours on the circle and find a range of complements which will match his architectural scheme. Thus he can choose an orange : blue-violet range or a yellow-green : crimson range and in each case he will know that he is dealing with the neutral complementary colours and is in a position to play with various colour combinations in a way that has hitherto not been possible.

This is the third of a series of announcements, six in all, describing a new system of colour co-ordination for flooring. Copies of the whole series will be available shortly.



THE ULTIMATE IN
PROTECTED METAL SHEETING
FOR ROOFS AND SIDEWALLS



MANUFACTURED BY THE MAKERS
OF THE WORLD FAMOUS R.P.M.

Galbestos Protected Metal (G.P.M.) is available in 3 gauges and 2 types of corrugations; standard colours are black and maroon. The strong steel core sheet of G.P.M. guarantees against breakage either in transit or during erection.

G.P.M. can be cut, drilled and punched on site without damage.



Literature sent on request

ROBERTSON THAIN LTD

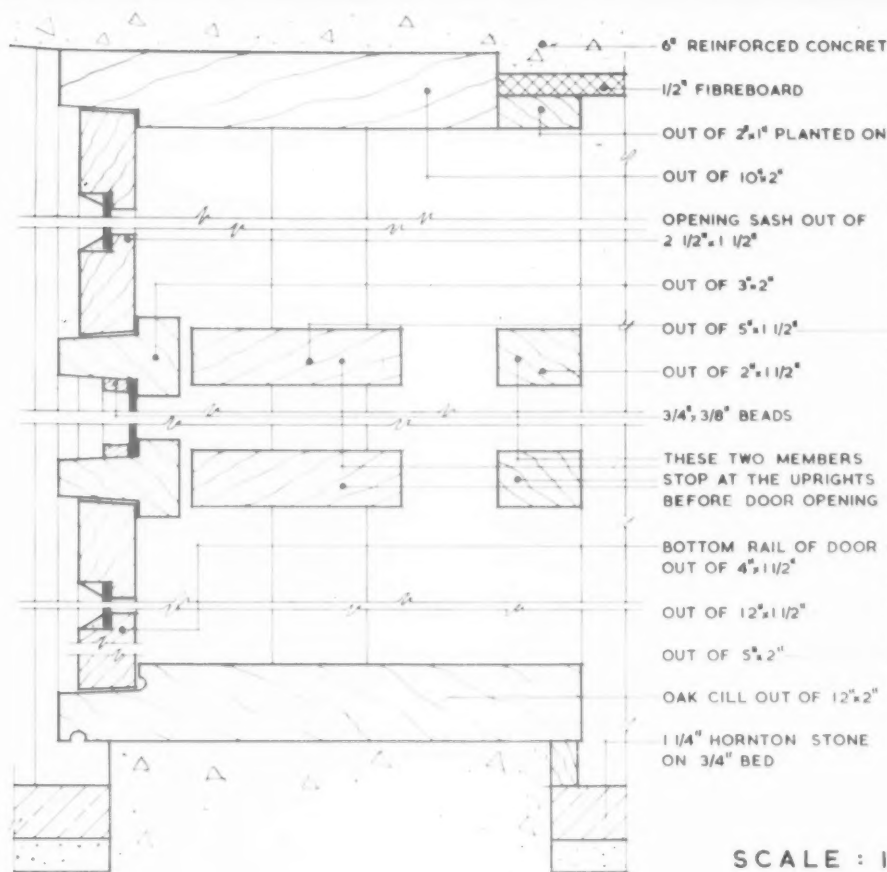
ELLESMERE PORT • WIRRAL • CHESHIRE

Telephone: ELLESMERE PORT 2341 Telegrams: "ROBERTCOF"

Sales Offices: LONDON, GLASGOW, BELFAST, BIRMINGHAM, NEWCASTLE, LIVERPOOL, SHEFFIELD, MANCHESTER, CARDIFF and EXMOUTH

Agents in most countries throughout the world

P.4



6" REINFORCED CONCRETE SLAB

1/2" FIBREBOARD

OUT OF 2"x1" PLANTED ON

OUT OF 10"x2"

OPENING SASH OUT OF
2 1/2"x1 1/2"

OUT OF 3"x2"

OUT OF 5"x1 1/2"

OUT OF 2"x1 1/2"

3/4", 3/8" BEADS

THESE TWO MEMBERS
STOP AT THE UPRIGHTS
BEFORE DOOR OPENING

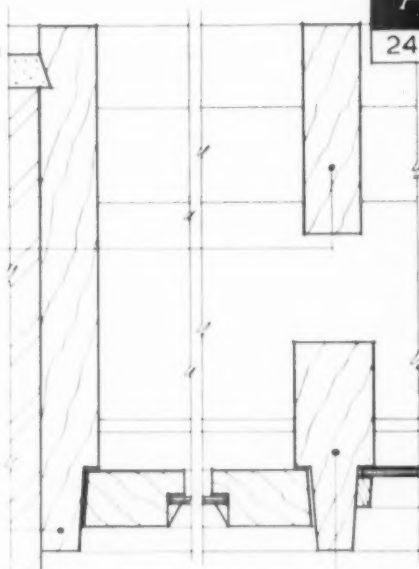
BOTTOM RAIL OF DOOR
OUT OF 4"x1 1/2"

OUT OF 12"x1 1/2"

OUT OF 5"x2"

OAK CILL OUT OF 12"x2"

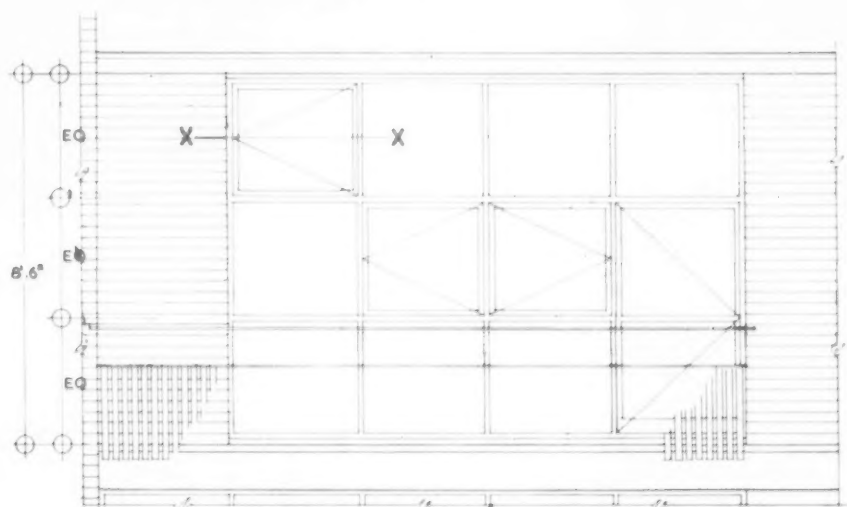
1 1/4" HORTON STONE
ON 3/4" BED



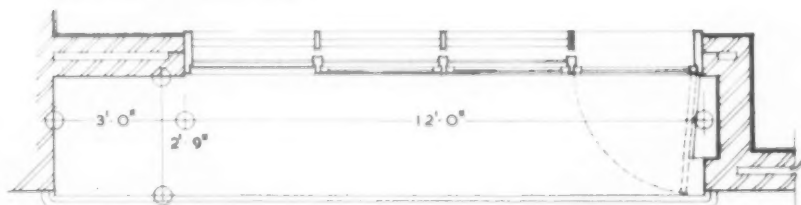
PLAN ON
LINE X-X

SCALE : 1/4 FULL SIZE

VERTICAL SECTION



KEY ELEVATION



KEY PLAN

SCALE : 1/4" TO 1'-0"

2"x1/2" M.S. HANDRAIL

2 1/2"x1 1/2" ANGLE

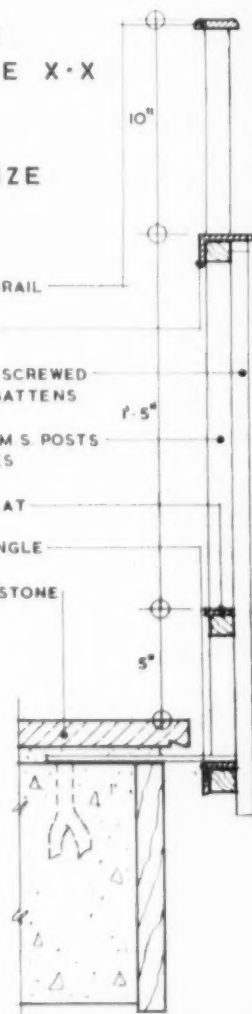
1 3/4"x3/4" SLATS SCREWED
TO HARDWOOD BATTENS

1 1/8" 1 1/8" SOLID M.S. POSTS
AT 2' II CENTRES

1 1/2"x1/2" M.S. FLAT

1 1/2"x1 1/2" M.S. ANGLE

1 1/4" HORTON STONE



DETAIL OF RAILING
SCALE : 1 1/2" TO 1'-0"



FLAT CONVERSION: CONNAUGHT MEWS
ARCHITECTS: YORKE, ROSENBERG & MARDALL



R.I.W. PROTECTIVE PRODUCTS

for DECORATION and PROTECTION

R.I.W. LIQUID KONKERIT

For Exterior Damp-proofing with Decoration of Concrete, Stucco, Brick or other Masonry Surfaces

Leaflet Ref. No. 21 53

PROTEC ENAMEL PAINT

For Interior and Exterior Decoration and Protection

Leaflet Ref. No. 7 53

PROTEC NO. 424 CHLORINATED RUBBER PAINT

For Internal and External Protection and Decoration of all Building Surfaces and Asbestos Cement Sheetting exposed to Acid and Alkali conditions

Leaflet Ref. No. 8 53

PROTEC NO. 303 EMULSION PAINT

For Interior and Exterior Decoration and Protection of Wall Surfaces, Plaster, Cement, Stucco, Brick and Asbestos Cement Sheetting

Leaflet Ref. No. 10 53

PROTEC FLAT OIL PAINT

For Interior Decoration on Walls, Ceilings and Woodwork

Leaflet Ref. No. 11 53

PROTEC NO. 604 IMITATION STONE PAINT

For Interior and Exterior Wall Decoration

Leaflet Ref. No. 9 53

R.I.W. CEMENT FLOOR AND WALL ENAMEL

For Hardening, Oil-proofing, Dustproofing, and Decorating Interior Concrete Floors, Walls and other Surfaces

Leaflet Ref. No. 16 53

R.I.W. NO. 110A DAMP RESISTING PAINT

For the Painting of Steelwork to be encased in concrete or other Masonry and for Interior Iron, Steel or other Metal subject to Fumes of Acids or Alkalis

Leaflet Ref. No. 17 53

NUFLOOR FACTORY

BASILDON, ESSEX

ILLUSTRATED AND DESCRIBED ON PAGES 361 TO 366

CLIFFORD STRANGE—CHARTERED ARCHITECT

Assistant-in-Charge: R. J. MACKAY

R.I.W. MATTOX

OIL-BOUND WASHABLE WATER PAINT

was the automatic choice of the Architect for the interior decoration of the above Factory by reason of his experience, over many years, of the superiority of this product.

The importance of colour as an aid to production and the welfare of operatives is being increasingly recognised and considerable thought was given by the Architect to this aspect. In all, some fourteen different shades were supplied, some being specially manufactured to the Architect's requirements.

R.I.W. Mattox provides a beautiful satin-like flat finish, unparalleled in durability for a water paint and unsurpassed in appearance by a flat oil paint. It is easily applied by brush or spray; is non-poisonous, washable and fast to rubbing. Its use ensures a durable, artistic and truly economical finish and one which allows easy, quick and cheap repainting for maintenance.

Leaflet Ref. No. 12 53

R.I.W. LIQUID ASPHALTIC COMPOSITION

For concrete floor slabs, foundation walls, ducts, lintels, encased columns, beams and superstructures

R.I.W. Liquid Asphaltic Composition is the original waterproof membrane material, and as such has a very long history of proved performance. It is consistently specified by leading Architects and Engineers on major projects of all descriptions, and being a true asphaltic composition, maintains its superiority as a permanent waterproof barrier for all types of constructions both above and below ground level.

The whole of the concrete columns and beams at the Nufloor Factory were coated with this material, in accordance with our standard recommendations, prior to the erection of the exterior 4½ in brick cladding, thereby providing the essential and permanent waterproofing of this portion of the structure.

Leaflet Ref. No. 3/53

FOR TECHNICAL EFFICIENCY, PROVED PERFORMANCE AND REPUTATION, R.I.W. PROTECTIVE PRODUCTS CONTINUE TO LEAD IN THE SPHERE OF CONSTRUCTIONAL WATERPROOFING, PROTECTION, DAMP-PROOFING, PRESERVATION AND DECORATION OF ALL TYPES OF SURFACES AGAINST A WIDE VARIETY OF DESTRUCTIVE AGENCIES.

★ Literature and Shade Cards immediately forwarded on request. Please write to Department ABN.

THE R.I.W. PROTECTIVE PRODUCTS CO. LTD., 325 WHITEHORSE RD. CROYDON

TELEPHONE: THORNTON HEATH 6121

TELEGRAMS: CEMENFLOR, CROYDON

STEELWORK

has become the outstanding structural medium in the world because . . .

ARCHITECTS welcome the adaptability of steel, its ability to provide wide spans and the compactness of its structural members.

CONSULTING ENGINEERS prefer the simplicity of steel construction, free from the need for elaborate detailing, and complex calculations.

CONTRACTORS appreciate the forthright nature of steelwork, with straightforward connections, free from the possibility of hidden errors, and can benefit by the pre-fabrication of the structural members while the site is being prepared.

OWNERS OF NEW BUILDINGS benefit from all these advantages, together with the economic advantage of early development of the sites.

**STEELWORK is now
UNRESTRICTED,**

*and the services of the fabricators
throughout the country are at your command.*



B·C·S·A

BRITISH CONSTRUCTIONAL STEELWORK ASSOCIATION, ARTILLERY HOUSE, ARTILLERY ROW, WESTMINSTER, S.W.1

POINTS FROM PAPERS

ECONOMIC HOUSING LAYOUT

Synopsis of a paper delivered to the Town and Country Planning Summer School at Bristol on September 8, by J. L. WOMERSLEY, A.M.T.P.I., A.R.I.B.A.

WHAT, you may well ask, was Mr. Womersley's justification for delivering, to a highly technical audience, a paper of this nature. His answer to this simple question was the general recognition that there is a disturbing difference between the best and the worst of our post-war housing schemes.

"Great wonderment," he stated, "has often been expressed during the first half of the century that with the examples of Port Sunlight, Letchworth and Bournville before us, the vast bulk of our housing development has been so appallingly bad. Now, as we proceed into the second half of the century, we may equally wonder why it is possible to produce layouts of the standard of Harlow, Hatfield and Crawley at one and the same time as the abominable strings of semi-detached mediocrity which we still see under development in some other parts of the country. Clearly, what is needed to-day is not so much to improve the best as to bring the average level of housing layout very much nearer to it." Very few will disagree with these introductory remarks.

Under the heading of Justification for Economy, Mr. Womersley threw a different but important meaning on the word "amenity." This, he felt, might be defined as "for the community to live the fullest possible life." His expansion of this definition is worthy of careful study.

"It is probably wrong to condemn families with young children to a life remote from the ground. It is probably equally wrong for professional men who may themselves desire to imitate their wealthy acquaintances living in detached houses at 4 to the acre, by living in garden city suburbia at 10 to the acre, to imagine that life of such a nature is the dream of the proletariat. Man in his more natural and less class-conscious state is gregarious and what the late Professor Reilly called 'the friendliness of the slums' should be fostered carefully in our new housing schemes, for in it lies the essence of the community spirit. These people like to talk to one another without dressing up and making special calls. The women like to sit on their doorsteps and chat on warm, summer afternoons and their small children like to play together in a common garden outside their houses where they are safe from traffic. The terrace, the small house group, round the Square or Green are ideal for these fundamental requirements. To fence each family in and separate it from its neighbours is to completely misunderstand the problem by seeking to impose upper class snob-idealism on the less inhibited members of the population. Thus in rejecting the semi-detached for the terrace, the lower density for the higher density, the less architectural for the more architectural we are at the same time providing more adequately for the social life of the people, saving land and saving expense in buildings, roads and services.

Organization for Economy

"The first and fundamental factor is that no layout can be completely successful both aesthetically and economically, unless its designer is aware of, and sympathetic to, the plans and appearance of the individual dwellings. Unfortunately, there are still persons in positions of responsibility who think that housing layouts can be produced by putting down parallel roads at intervals of a couple of average plot depths and then getting some half-baked architectural draughtsman to fit in the houses. This is precisely what the speculative builder did between the wars (and despite large municipal and county planning staffs he is being allowed to start doing it all over again), and many local authorities have themselves never done it in any other way.

"The essential need so far as organization is concerned is therefore that either the architect-planner should be in charge of the design of the whole project or, when the hous-

ing architect and layout planner are two separate persons, there should be a complete and harmonious partnership between them from the outset.

Housing Types

"The point at which the house plan is most inextricably related to the layout is on the question of the provision for fuel and refuse in the house and the arrangements made for their delivery and collection in the layout. It is, in fact, no exaggeration to say that house design and housing layout today centres on the coalshed and the dustbin.

"These matters have always presented a difficult problem in late 19th and 20th century terrace housing, though in earlier days it appears to have been solved simply enough by the basement-level service area. The post-war development of the private internal passage-cum-store is considered to have many advantages. Such an arrangement allows the bin to be placed in the front wall of the house where it can be made accessible to the housewife from within and the refuse collector from without.

"From the point of view of these undignified services, the Radburn type of layout which provides footpath access to the front, or park, side of the house and a service road to the rear, on which the various stores are located, undoubtedly gives the best of both worlds.

"Another major factor affecting economy is the house frontage. The semi-detached block with outbuildings at the flanks, just as it is the easiest to plan, is also the most flagrantly wasteful in this respect. Frontage is of particular importance today because the present basis of housing layout largely depends on accepted minimum distances between blocks of dwellings of certain heights which are in turn related to angles of light. Thus the greater economy which can, within reason, be introduced in frontage width the greater will be the density and the less will be the cost of roads and services per dwelling.

"Whilst a variety of dwelling types is essential to house families of different sizes economically, it is important that variations in any one particular size of dwelling should be reduced to a minimum. It should also be remembered that variety in the plans of houses does not necessarily produce variety of elevation. Diversity of appearance in housing layout is achieved far more easily and economically from the outside by such methods as using different porch designs and introducing special types of windows at certain strategic points.

House Grouping

"Fortunately, certain national trends are at the present time assisting in the production of economy and variety in housing layout. The proportion of small families of 1, 2 and 3 persons is rising appreciably with the result that layouts consisting entirely of the 3 bedroom, 5 person 'semi' are no longer an economic proposition. At the same time the flat dwelling is, in general, more suited to the small than to the large family. Thus, it is becoming generally accepted that layouts of two-storey houses can be varied by the introduction of two- and three-storey flats, of three-storey blocks of flats and maisonnettes combined, and of four-storey maisonnettes, in none of which is the highest floor for daily living purposes more than two flights of stairs from the ground. A further most useful economy may be achieved by the introduction of two-storey corner flats, carefully planned in height and roof span to link together terraces of ordinary two-storey houses at right-angles to each other. The use of such flats has many advantages, both from the economical and architectural aspects."

Before leaving the question of densities, Mr. Womersley emphasized two conclusions which it would be difficult to deny. The first that whilst inter-war development produced

better dwellings it produced worse towns and low density lay close to the root of the trouble. By contrast many of our universally admired old towns are associated with medium or high densities. The second point was that the price of higher density is better design.

Grouped versus Ribbon Development

Frederick Gibberd has the happy facility of expressing current architectural and planning trends in clear, precise English. The swing away from the corridor-street in some of the most recent and best of post-war developments he describes as the change from the linear to the spatial layout. This is, of course, little more than a return to the urban planning principles of the 18th and early 19th centuries, as embodied in the squares of London, Bath and Edinburgh, adapted to 20th century social conditions. Nevertheless, the lineal, or corridor-street, type of layout has now had such a long uninterrupted run in housing schemes that the present indications of a change may be of considerable significance.

Intelligent comparison between the picturesqueness of our old villages and towns and the monotony of our inter-war suburbia shows all too clearly where the mistakes lie. According to our pre-war planning principles all these carefully preserved nooks and corners, with their delightful sense of intimacy and charm, should be cleared away as being unfit for habitation. Where is the 24ft carriageway, the 70ft space between buildings? They are not there because these gems of urban design were based on naturally evolving principles rather than on arbitrary mechanical restrictions. If we are to return to urbanity and economy in our housing layouts we must put an end to the traffic-worship of the first half of this century, and re-learn the art of creating a safe, happy and beautiful environment for living. We must bring our buildings closer together again and put traffic in its proper place.

Rather surprisingly, in view of its desire for higher densities, the Ministry's handbook appears to accept the arbitrary convention that rows of two-storey houses should be kept at a minimum distance of 70ft apart. This seems quite out of keeping with the progressive outlook of the rest of the booklet, and the authors are recommended to take a look at Hatfield, Wrexham and other competent contemporary schemes. If this attitude is maintained the charm and character which the handbook extols will be difficult to resurrect. Sixty feet has been tried with success and, according to circumstances, 55ft might well be allowed for limited distances and 50ft at salient points.

Roads and Services

Both Unwin and Parker were at pains to inform their fellow-planners that "the acid test of the financial efficiency of plans for housing schemes is the length of road per house." They went even further in their endeavour to put housing economy in proper perspective by drawing attention to the fact that cottages were frequently reduced in size or otherwise cut down to save comparatively small sums when more careful consideration of the road schemes would have saved infinitely more. They were referring to private enterprise developments where sound economies were essential to the continuation of the project. There were no subsidies and loans to lull these men into the false sense of affluence which in recent years has prevailed in local authority housing.

Despite these time-worn words of wisdom, many housing architects today are astonished at the small attention which has been given to possible reductions in road costs in comparison with the energy and ingenuity displayed in knocking even shillings off the cost of the house itself. It is surely time that the length and specifications of housing roads came in for more concentrated attention. An enforced reduction in road length per dwelling would have a far more beneficial effect on the layout than reduction in floor space has on the house itself.

If we accept the principle of spatial layout previously, the importance of the road in housing layout will suffer a severe, but overdue, eclipse. Vast areas of concrete and tarmac which have been provided mainly to allow traffic to get about easily and speedily, will be turned into paved and grassed courts for the delight of the residents, whose life will be correspondingly less noisy, less dangerous, less costly and more beautiful.

Spaces Around Dwellings

One of the greatest anomalies of the 10- or 12-to-the-acre development of the inter-war estates was the serious waste of land which resulted from the inability of the average tenant to cope with the enormous garden which, to his dismay, he found attached to the rear of his house. Several factors operate against the economical use of a large private garden, the most recent being the habit of both man and wife of going out to work. Other reasons are that men doing a hard physical daytime job do not feel equal to more heavy work in the evening, and that many people simply do not want to feel obliged to do regular gardening work. To obtain the most economical use of land, therefore, it seems clear that estates should be designed to provide minimum gardens, which will allow all tenants to keep them tidy, together with groups of allotments for those with the urge and time for cultivation of greater areas.

A much more controversial matter is the question of the construction and maintenance of the non-productive open spaces between the blocks of dwellings. The ideal arrangement from the point of view of safeguarding appearance would seem to be to put the whole work in the hands of the local authority. This method, however, as well as being the easiest way out, is also the most costly. In addition, it imposes a severe strain on the manpower resources of the authority. Nevertheless, when such a principle as the open front garden is first introduced into any particular area there is much to be said for the appropriate Department's constructing and maintaining it, for a time at least, to provide a practical example to the tenants of the effect which it is desired to achieve. Once having got the idea over it should be possible, with the co-operation of a sympathetic Housing Manager, to obtain the same resulting appearance with the tenants both constructing and maintaining their individual front gardens, these gardens being separated from the public footpath only by a simple stone kerb.

There still remains the public open space serving the whole house group which, until an ideal society versed in matters of art and culture evolves, is undoubtedly most successful if maintained by the Local Authority Housing Committee.

Alternatives to grass should be deliberately introduced, first for the sake of variety, secondly to provide playing space for the children during weather when the grass is unsuitable, and thirdly to reduce maintenance costs. Suitable pavings as an alternative to grass, which at the same time are reasonably cheap in capital costs, are not easy to find. The cheapest would appear to be tar-macadam with a binding of sand to lighten the colour; other alternatives such as biophalt, pebbles, plain and coloured concrete, flags, flints and setts becoming progressively dearer though varying according to locality and availability.

In working out the true comparative costs with grass it is necessary to take into account the capital costs of each material and the annual loan charges and maintenance costs and it is surprising, when taking this overall view, how difficult it is to find a paving material to compare in cost with grass despite the regular cutting it requires. A superfluity of grass is undeniably to be preferred to a superfluity of roads from an appearance point of view. It is also far less costly.

Mr. Womersley concluded on a down-to-earth note known all too well by those planners and architects who have to deal with housing committees.

"There is abundant criticism to-day of those who would reduce the cost of housing. The cry is that living standards will inevitably be reduced and that we are in danger of returning to 19th-century conditions. Of course, there is always a latent danger in any economy, and the vigilance of the idealist who would create Utopia even at the risk of bankruptcy doubtless serves a useful purpose. Nevertheless, the serious student of planning, concerned to spend wisely and conserve public resources, is not content to achieve his goal merely by jettisoning standards. His mission is a double one—to lower the cost of housing and at the same time to make a better job of it. Who to-day, after surveying our recent achievements in the housing field, would be bold enough to say that this dual objective is unattainable?"



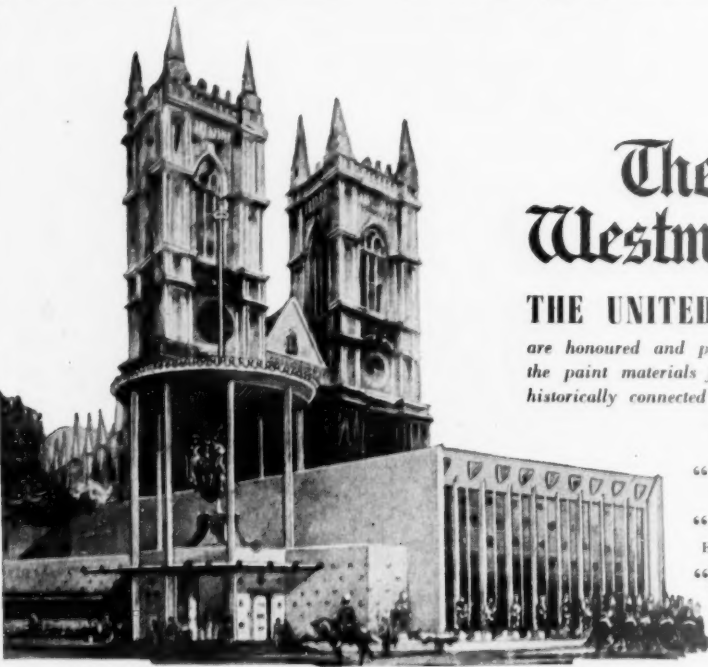
WINDOWS PLUS

*strong, bronze fittings
simplicity in design and
first-class manufacture
hot-dip galvanized finish &*

HOPE *Quality*

HENRY HOPE & SONS LTD.

SMETHWICK, BIRMINGHAM & 17 BERNERS STREET, LONDON, W.1






The Annexe to Westminster Abbey

THE UNITED PAINT COMPANY LTD.

are honoured and privileged to have manufactured exclusively the paint materials for the decoration of this impressive and historically connected building, constructed to the design of the Ministry of Works

The products used include

<p>"UNISTUC" LIQUID STONE FOR THE EXTERIOR FINISH</p> <p>"UNITAS" ENAMEL PAINT</p> <p>"HYDROMATT" EMULSION PAINT</p>	<p>"UNIMATT" FLAT FINISH</p> <p>"UNIGLAZE" ENAMEL</p>
---	---

from the  *range*

15 St. Helen's Place, London, E.C.3.

Ministry of Works Crown Copyright Reserved

Gibson

CLOCKS STAND THE TEST OF TIME



No. 303

Designed for INDUSTRY AND COMMERCE, Gibson Clocks are correct in factories, workshops, mills, offices or schools—in fact wherever time indication is required.

A Master Clock impulse system operating any number of Slave Clocks, and independent of the mains, ensures perfect reliability.

For those with a single office or showroom a battery-wound clock will give perfect service—and no winding, wiring or maintenance is necessary, except to change the 4.5 volt torch battery about every twelve months.

Clocks for special purposes made up to client's specification.

Master Clocks • Slave Clocks • Battery Wound Clocks
Synchronous Clocks • Time Recorders • Job Costers

Illustrated Brochure available on request

Baume & Co. Ltd

1, Hatton Garden, London, E.C.1. & La Chaux-de-Fonds.
Established 1834

BAUME
WATCHES

Longines
WATCHES


TIMERS

Gibson
CLOCKS

"The Mersey Room" **Restaurant** **Lewis's Ltd., Liverpool**

designers :
MISHA BLACK, ROBERT
GUTMANN and GUNTHER
HOFFSTEAD of Design
Research Unit



Seating on the raised carpeted area. The wall panels of Cedar of Lebanon are decorated with sixteen episodes of the history of Liverpool, designed by Susan Einzig.

A general view. The columns are decorated in mosaic by Dernbach Mayen. The rear mirrored wall will later be demolished and the restaurant extended when war damage repairs are completed.



The entrance doors. The interior glass screen is decorated with the house flags of Liverpool shipping companies.

THE Restaurant is designed to appeal to the general family clientele of the store. The area is 60ft x 40ft, and seats 180. When war-damage repairs to the structure of the building have been completed, the Restaurant will be extended, the temporary mirror wall being removed. The seating is on two levels, the ceiling rising in the central portion where it is illuminated by cold cathode tubes concealed in a leather-covered trough. The Restaurant is fully air-conditioned, the installation having been designed by the Chief Engineer of Lewis's, Ltd., and the Bradshaw Fan & Ventilation Co., Ltd.

The walls are panelled in Cedar of Lebanon, and Susan Einzig designed the sixteen incised carvings of events in the history of Liverpool. The Mosaic work on the pillars was designed and executed by Dernbach Mayen, in vitreous glass. The decorative glass screen, showing the House Flags of Liverpool Shipping Companies, is sandblasted into 1/4-inch thick glass, and was made by the London Sand Blast Decorative Glass Works, Ltd.

The tables and chair-frames are of English Cherry Wood, and were made by Bath Cabinet Makers, Ltd. The chairs have leather seats and cane backs; the bronze table lamps have nylon shades, other lightfittings being in brass and anodized aluminium. Metalwork generally is gunmetal finished bronze and stainless steel, and the balustrades are of black leather with brass studs.

The general contractors were E. Pollard & Co., Ltd.



Missed Opportunities

by T. C. Gilbert, M.I.E.E.

IN these columns in January, 1946, the present writer forecast some of the relaxations then contemplated in connection with rules and regulations governing electrical installations to small houses, the outcome of work of a committee convened by the Institution of Electrical Engineers, with its findings embodied in Post-War Building Study No. 11, "Electrical Installations." These relaxations were designed to ensure more adequate installations in post-war houses, by reducing the cost of wiring, especially to socket-outlets, and the removal of that bugbear—the existence of several sizes of socket-outlets and plugs in the same installation.

How often in the past the householder would complain of the lack of facilities and the odd sizes of plugs with which he was plagued? The new methods proposed overcame all these complaints, first, by so relaxing requirements for wiring to socket-outlets that many more could be provided for a fractional increase in cost, and, secondly, by introducing a completely new design of socket and plug that could be used indiscriminately for all purposes—lighting, heating and small power. It is therefore most disappointing to find, after a lapse of seven years, that comparatively few architects are taking advantage of these new methods—a recent examination of wiring specifications for local authority housing showed that only one out of five incorporated one advance and two out of five the other—whilst manufacturers inform us that their sales of

the older types of sockets and plugs are four times those of the new type, and which were intended to actually supersede the former.

How can these matters be brought more effectively to the notice of architects, probably concerned with many small and worrying details associated with buildings for local authorities, and to whom the electrical installation is just one more detail? The old specification that has served them so well for so long must be made to serve another term—there just isn't time to study all these circulars and things from the electrical people. The South-West Scotland Electricity Board, amongst others, has endeavoured to draw attention to the new methods and economies by means of circulars to those concerned with electrical specifications, but the reception of these is not without some small suspicion that advantage to the supply authority would accrue with their adoption. Actually, the only people who would benefit would be the householders, on two counts; one, by obtaining more adequate electrical installations in their new small houses, and the other, as ratepayers, by the cheapening of installations to the local authority.

The most important of these new practices is the domestic ring circuit, the introduction of which has now received the complete approval of all relevant current rules and regulations. Under the old rules, every 15 ampere socket-outlet (known also as "power" or "heating" plugs) had to be separately wired back to the distribution board in 15 ampere cable and connected to a separate and individual 15 ampere fuseway. Six such socket-outlets therefore—a small allowance, after all—meant a 6-way distribution board and a 60 ampere main switch fuse in addition to the long independent cable runs. Under the ring circuit arrangement one pair of 15 ampere cables is run through all the rooms with all socket-outlets connected to this ring; further, spur circuits supplying up to two socket-outlets may be extended from this ring circuit, and the general layout is shown in Fig. 1.

Apart from the obvious economy in cable, conduit and labour, it will be noted that the only controlling fusegear required is a switch fuse, or fuseway, of 30 ampere capacity. It is necessary, however, that the new type of socket and plug to B.S. 1363 be utilized with the ring circuit, as the plugs have small cartridge-type fuses enclosed for the local protection of the connected equipment or standard lamps. The sockets and plugs are all of 13 ampere capacity (representing 3 kilowatts at standard voltage) and are thus suitable for any type of demand, from a 3 kilowatt radiator to a 5 watt clock or radio receiver; all that is necessary is the insertion of the suitable size of fuse in the plug, of which three sizes, 3, 7 and 13 ampere, are available. In houses of more than 1,000 sq ft of floor area the number of socket-outlets

that may be connected to any one ring circuit is limited to ten; in smaller houses the number is unrestricted.

In Fig. 1 some 17 socket-outlets are shown connected, directly to the ring and by spurs, and this would not be an excessive number for a three-bedroom local authority house; they would probably cost no more than half that number installed under the old regulations. There is no need for the busy architect to study the technicalities of the circuit, all he need do is incorporate the following in his specification—"all socket-outlets, whether for lighting, heating or small power, shall be of B.S. 1363 pattern, and wired on a ring circuit in accordance with Reg.

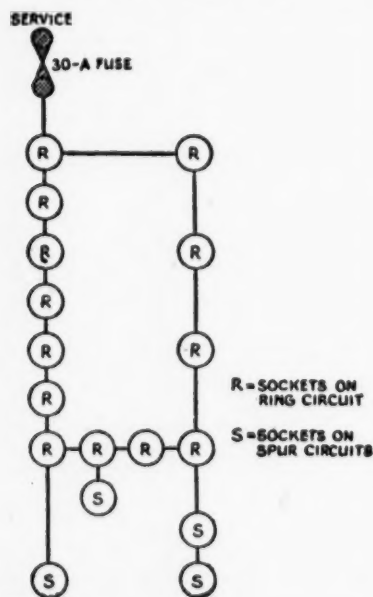


FIG. 1

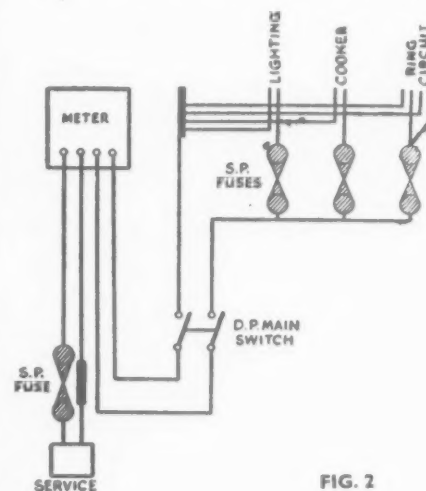


FIG. 2

201 (C) Exemptions (iii) and (iv), 12th Edition of Regulations for the Electrical Equipment of Buildings issued by the Institution of Electrical Engineers, 1950." The wiring contractor knows the rest of the story.

This being achieved, the next step would be to popularize the use of the now standardized (B.S. 1454) consumer's control unit. Most architects will remember the old conglomeration of main switches, switch fuses, splitters and distribution boards, festooned round with cables for connection to the meter and service fusebox, which marred the best-laid-out installations of the past, and, unfortunately, in far too many cases still do. The regulation requirements for control gear have now been cut to a minimum and under the standard arrangement all parts have been incorporated in a metal or plastic housing, including the service cable termination and with provision for the meter connections; in fact, everything necessary for the small house is shown in the simple arrangement shown in Fig. 2. All fuses are now single-pole, that is, placed in the phase, or live, conductor only, all neutral connections coming back to a common busbar unfused. Those under the consumer's control are one 5-ampere fuseway for the lighting circuit, one 30-ampere fuseway for the

CRITTALL WINDOWS



-and pressed steel products

now that steel rationing has ended,
are readily available again—with hot-dip galvanized finish. Crittall
pressed steel products include door frames, partitions,
lavatory cubicles, sills and sub-frames.

THE CRITTALL MANUFACTURING CO. LTD., BRAINTREE

Nothing like

Timber r-r-r-r-r-r-r-r

to make wood with

A good building board will resist condensation, damp, heat, cold and noise . . . it will be strong, and rigid or flexible according to what is required of it. Lloyd boards are made from pulped wood; they are, in fact, *wood*—but without the grain, the knots, the shake, the weight—or the cost. They store easily and are made in standard sizes and grades. Building boards, hard-boards and insulation boards. If you want boards—come to Bowaters.



BOWATERS BUILDING BOARDS LIMITED

**Bowater House, Stratton Street,
London, W.1. Tel: GROsvenor 4161**

A member of the Bowater Organisation



ring circuit, and another 30-ampere fuseway for the cooker circuit; one 60-ampere double-pole switch controls everything.

It may be pointed out that with the use of the ring circuit for all socket outlets, including those for lighting, a second purely lighting circuit, over and above the one shown in Fig. 2, is rarely necessary, as all standard lamps provide a lighting stand-by in the event of the lighting fuse being blown, thus avoiding complete darkness. The old restriction of ten lighting points to a circuit has gone, the requirement now is that there shall be one lighting circuit per 1,000 sq ft of floor area. In a house of this size with, say, twelve lighting points and twelve socket-outlets, the cost of wiring should be reduced by something like 25 per cent

as compared with the old requirements for lighting and heating installations.

The writer has heard architects object to the use of the standard consumer's control unit on the grounds that with an enclosed unit of this kind extensions to the installation may be rendered difficult. The answer to this is, that if the installation is adequate in the first place no extension need be visualized; if additions may be contemplated at some time in the future it is a simple matter to incorporate a couple of spare fuseways in the control unit, as these are obtainable in every conceivable variation of number and capacity of fuseways. Further, if additional socket-outlets are ever required in an installation equipped with the ring circuit these can be simply extended from any existing socket-

outlet, by means of the spur circuits shown in Fig. 1.

Space may be found for one further grouse—that architects will *not* specify or accept the newer micro-gap slow-action switches which, with their silent and velvety action, should certainly appeal. Most specifications still contain reference to quick-make-and-break switches, with their thundering action, and which, although desirable or even necessary with the old direct current supplies, are positively detrimental in these days of alternating currents. The new slow-action switches are extremely simple, and with their absence of springs and toggles practically everlasting, but again manufacturers inform us that the demand, as compared with the old types, is small.

Conference on Welded Structures

A Conference to review present knowledge and outstanding problems in the design, fabrication and erection of welded steel structures is to be held at the Institution of Civil Engineers, Great George Street, London, S.W.1, on November 23-27 inclusive.

The organization is being undertaken by a Joint Committee appointed by the Ministry of Works, the Institution of Civil Engineers and the Institution of Structural Engineers, with the support of the Admiralty, War Office, Ministry of Supply, Ministry of Transport and Department of Scientific and Industrial Research.

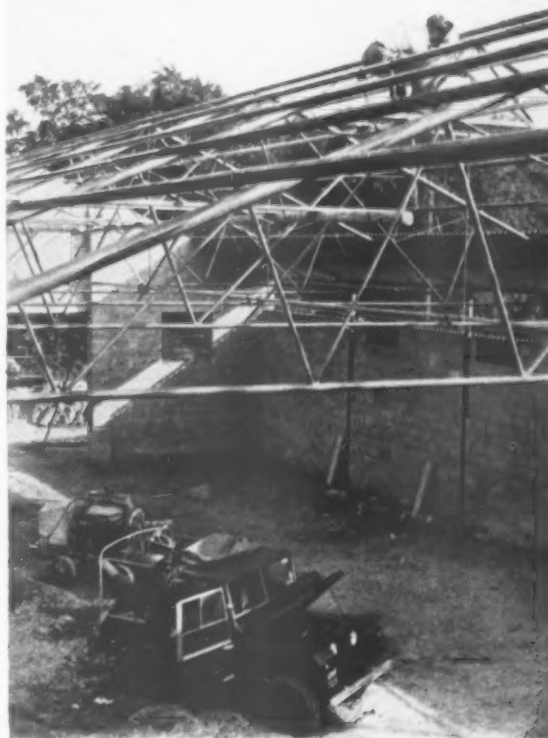
The Conference is open to all interested in the subject, who register as members. Applications for membership should be made to:—The Joint Honorary Secretaries, Conference on Welded Structures, Institution of Civil Engineers, Great George Street, London, S.W.1, from whom application forms can be obtained.

Application forms can also be obtained from any of the following bodies who have agreed to be co-sponsors of the Conference:—Lloyds Register of Shipping, The Royal Institute of British Architects, the Institution of Mechanical Engineers, The Institution of Engineers and Shipbuilders in Scotland, The Institution of Naval Architects, The Institution of Gas Engineers, The Iron and Steel Institute, the Institution of Electrical Engineers, the Institution of Municipal Engineers, The North East Coast Institution of Engineers and Shipbuilders, The Royal Incorporation of Architects in Scotland, The Institute of Welding, The British Welding Research Association, The British Constructional Steelwork Association, The British Iron and Steel Research Association.

A registration fee of £2 10s will entitle members to receive full details of the Conference programme; to take part in all the activities of the Conference; and to receive one copy of each paper and one copy of the Proceedings. Remittance must accompany the application form and be sent to the Joint Honorary Secretaries before October 1 next.

Eleven topics have been chosen for discussion. The procedure at the Conference will be to give the author of the paper a short time to introduce his paper, leaving the rest of the session free for general discussion. The author will be given an opportunity, at the end of the discussion, to reply briefly to the points raised.

The following, at the invitation of the Organizing Committee, have agreed to present papers on the subjects named:—Paper No. 1, W. A. Mitchell, M.I.Struct.E., M.Inst.W., "Design of Multi-storey Framed Buildings." 2, D. C. C. Dixon, B.A., A.M.I.C.E., "Problems of Fabrication and Erection of Multi-storey Framed Buildings." 3, F. C. Cocks, B.Sc., M.I.N.A., M.Inst.W., "General Review of Welding in Ship-building." 4, F. J. Walker, A.M.I.C.E., and F. W. Sully, M.I.C.E., "Dock Gates and Caissons." 5, M.



Mobile Welding Plant on Land-Rover

Noone, M.I.Mech.E., "Standing Oil Tanks and Gasholders." 6, W. S. Atkins, B.Sc., M.I.C.E., M.Inst.W., "Design of Single-storey Framed Buildings and Portal Frames." 7, R. W. Schofield, M.I.Struct.E., M.Inst.W., "Fabrication and Erection of Single-storey Framed Buildings and Portal Frames." 8, S. M. Reisser, B.Sc., A.M.I.C.E., M.I.Struct.E., "Design, Fabrication and Erection of Braced Roof Structures." 9, G. Roberts, B.Sc., M.I.C.E., and O. A. Kerenky, B.Sc., M.I.C.E., "Design, Fabrication and Erection of Plate Girder Bridges." 10, E. M. Lewis, A.C.G.I., "Design, Fabrication and Erection of Trussed Girder Bridges." 11, T. Bedford, M.I.C.E., M.I.Struct.E., M.I.Mech.E., "Tubular Construction."

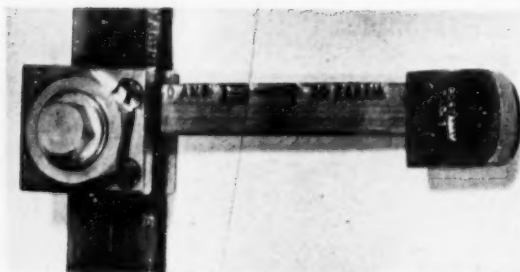
Advance copies of each paper will be issued to all members before the Conference. After the Conference, the papers will be published in book form as a permanent record of the Proceedings.

MOSAICS



SERVICES
LIGHT FITTINGS
B1/71

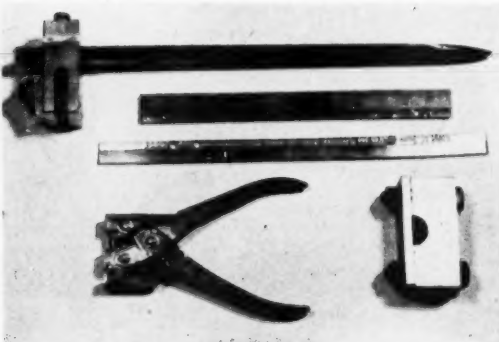
A post-top street lantern for class B roads made by Holophane Ltd., Elverton Street, S.W.1, one of two recently designed to give two-way non-axial light distribution with tungsten filament G.L.S. or sodium So/H discharge lamps. The lamp illustrated uses either 45 watt or 60 watt So/H sodium lamps.



The Portaway System of Earth-Continuity, designed specifically for the earthing of machinery, comprises specially designed and manufactured conductors with connectors and T-junction clamps in four sizes. The conductor of tinned copper has a thin flange at the side which may be holed with a punch designed for the job without reducing the area of the conductor. The hole is used either for fixing the clamps or for fixing the conductor to walls, etc. Another feature of the conductors is an arrow embossed on the flange which, if properly assembled, will point to the Earth. The upper picture shows two sizes of conductor with the appropriate T-junction and joining clamp.

Made by Porter Electrical Products Ltd., 11 Kings Road, Bramhope, Leeds.

FITTINGS
MISCELLANEOUS
C11/2



C11/2

This illustration shows a short length of earth spike, normally seven feet long, with a connector attached, two sizes of conductor, the patent punch and the block used for hammering the earth spike home. The conductors are made with cross-sectional areas of 0.015, 0.03, 0.06 and 0.1 of an inch. Made by Porter Electrical Products Ltd., 11, Kings Road, Bramhope, Leeds.



PLANT
OFFICE EQUIPMENT
E12/9

The Leda combined plan printer and developer is an entirely new machine that both prints and fully develops; cut sheets or continuous rolls of sensitized material can be used with equal results. The Leda produces dyelines fully developed, at combined printing and developing speeds of up to 12 feet per minute requiring only one operator.

The machine is compact and simple to operate as well as being mechanically efficient and of robust construction; it occupies 15in x 64in of floor space and is of clean, simple design; it is finished in hammered grey stoved enamel and is completely mobile.

Designed and manufactured by E. N. Mason & Sons Ltd., Arclight Works, Colchester.

INDUSTRIAL NOTES

● Structural & Mechanical Development Engineers, Ltd., 2, Buckingham Avenue, Slough, Bucks, announce that the company name has been changed to S.M.D. Engineers, Ltd. S.M.D. Engineers, Ltd., is the construction company of the Almin Group (parent company, Almin, Ltd., Farnham Royal, Bucks). The telegraphic address has also been altered and is now Alframe, Slough. The company specializes in aluminium construction and pre-fabrication, marketing "Alframe" bungalows, classrooms, hangars, industrial buildings, roofing, etc.

● The basis prices of copper are advanced as from midnight, September 16, by £2 10s per ton to the following, viz. :—

Plates, £293 per ton basis with usual trade extras.

Rods, £293 per ton basis with usual trade extras.

Sheets over 4ft, £291 10s per ton basis with usual trade extras.

These prices will be nett and not subject to discount.

● Ransomes and Rapier, Limited, of Ipswich, have been awarded a contract for the construction of sluice gates and operating gear for the Government of Iraq. This £570,000 contract was secured in the face of stiff competition from German, French and Austrian firms. Ransomes and Rapier were the only British firm to tender for this contract, which was awarded, not because it was the lowest in price, but because it offered the best design and quality of materials.

This contract is for the Wadi Tharthar project, about one hundred miles north of Baghdad, and entails the construction of 17 barrage gates, each 40ft span by 16ft deep, and 28 regulator gates, each 40ft span by 21ft deep, complete with operating gear. Nearly 4,000 tons of material will be involved in their construction. All the work will be carried out at Waterside Works, Ipswich, and will be shipped to Basra for Baghdad.

● The Directors of Tipper Industries, Limited, have declared an interim dividend of 7½% less income tax at 9s in the £, in respect of the year ending December 31, 1953, payable September 30, 1953 (same).

● Following the sudden death of Mr. A. M. Sommerville, A.I.P.A., Chairman and Managing Director, the Board of Directors of Sommerville and Milne, Limited, announce the unanimous appointment of Miss N. E. Harris, A.I.P.A., as Managing Director.

Miss Harris has been with the company since 1931 and served in most departments of the agency until her appointment to the Board in 1945. During the Second World War, when the late Mr. Sommerville and male members of the staff were on war service, Miss Harris was responsible for the entire administration and conduct of the business.

● John Wight & Co. (Edinburgh), Ltd., building contractors, have acquired a site at Earls Gate, Grangemouth, to transfer there entirely from Edinburgh in early 1954. The firm plans a new factory and office building on the site, employing some 650 workers on outside contracts; they also plan an apprentice training scheme for local youths. Business will be continued from their Edinburgh headquarters until the change takes place.

Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the

CONTRACT • NEWS •

OPEN

BUILDING

BEDFORD B.C. (a) 18 flats, Eastcotts Road Estate. (b) Borough Engineer, Newnham House, Horne Lane. (c) 3gns. (e) Oct. 22.

BIRMINGHAM C.C. (a) Supply, delivery and erection upon prepared foundations or existing steelwork approx. 70 tons of fabricated steelwork for block of flats and shops at Digbeth. (b) City Engineer, Civic Centre, 1. (c) 2gns. (e) Oct. 2.

BOOTLE B.C. (a) Alterations at No. 11, Breeze Hill, as short stay children's home. (b) Borough Surveyor, Town Hall. (c) 2gns. (e) Oct. 14.

CANNOCK U.C. (a) Erection and completion of (1) 48 houses, Old Fallow Estate, (2) 36 houses and 49 bungalows off Foster Avenue, (3) 28 bungalows, Southbourne Avenue, and (4) 28 houses, Laburnham Avenue. (b) Council's Architect, High Green. (c) 2gns each site. (e) Oct. 12.

CHERTSEY U.C. (a) Public convenience, Hamm Moor Playing Field, Addlestone. (b) Engineer and Surveyor, Council Offices. (c) 1gn. (e) Oct. 9.

CORBY U.C. (a) Public convenience, Town Centre. (b) Council's Clerk, Council Offices. (c) 2gns. (e) Oct. 10.

CORNWALL C.C. (a) 2-bay fire station, Town Car Park, New Road, Helston. (b) County Architect, County Hall, Truro. (c) 2gns. (d) Sept. 28. (e) Oct. 19.

DURHAM COUNTY POLICE AUTHORITY. (a) 2 pairs of police houses, Norfolk Road, Moorside Estate, Consett. (b) Police Authority Architect, Court Lane, Durham. (d) Sept. 30.

EAST SUSSEX C.C. (a) Blackwell county primary (junior) school, East Grinstead and/or Willingdon county secondary school. (b) County Architect, County Hall, Lewes. (d) Oct. 2. (e) Nov. 20.

HAMPSHIRE POLICE AUTHORITY. (a) Police house with office, Ipsley, near Ringwood. (b) County Architect, The Castle, Winchester. (c) 1gn cheque payable to Treasurer of Hampshire Police Fund. (d) Sept. 30.

HARPENDEN U.C. (a) 56 houses, Batford (South) Estate. (b) Council's Clerk, Harpenden Hall. (c) 1gn. (d) Oct. 1. (e) Oct. 26.

HATFIELD R.C. (a) Repair and alteration to the Public Mortuary, St. Albans Road. (b) J. H. Parker, 82, Great North Road. (c) Oct. 7.

HUDDERSFIELD B.C. (a) Almondbury primary school. (b) Borough Architect, High Street Buildings. (c) 2gns. (e) Oct. 6.

HUNTINGDON R.C. (a) 2 pairs of bungalows, Abbots Ripton. (b) K. A. Milner, Messrs. Lea, Milner and Wardley, 4, Market Hill. (c) 2gns. (e) Oct. 8.

address it is the same as the locality given in the heading, (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked ★ are given in the advertisement section.

MULLEN AND LUMSDEN

LIMITED

Contractors and
Joinery Specialists

41 EAGLE STREET, HOLBORN,
LONDON, W.C.1.

Telephones: LONDON: CHAncery 7422/3/4 CROYDON: ADDiscombe 1264

EBONITE FLOORING STRIP

MANY TYPES AND SIZES

EBONITE SINK WASTES

ROD TUBE SHEET
& TURNED PARTS

Manufacturers

The BRITISH EBONITE CO. LTD.
NIGHTINGALE RD., HARWELL, LONDON, W.7
ENQUIRIES INVITED. EALING 0125

Specify

CERRUX DECORATIVE PAINTS

CELLON LTD., KINGSTON-ON-THAMES

DAMP WALLS CAN BE MADE
WITH ONLY BONE DRY

ONE COAT OF

Penetrex

WATERPROOFING LIQUID

Absolutely Colourless, Penetrex does its job thoroughly, on all surfaces, Outside or Inside. One gallon covers 30 Square Yards. Sold by Builders' Merchants in all sizes from Quart tins to 10 Gallon drums. Send for price and name of nearest stockists to

F. A. WINTERBURN LTD.

(Incorporating Lithex Products)
HOLBORN STREET, LEEDS, 6. Tel.: 26602

A. & P. STEVEN LTD.

"APS" LIFTS

181 ST. JAMES ROAD, GLASGOW, C.4

Tel.: Bell 0356

LONDON: 10 Nicholson St., S.E.1. Tel. Waterloo 4465
MANCHESTER: 1: 12 Charles St. Tel. Ardwick 1391
EDINBURGH: 2: 2 North West Circus Place.

BIRMINGHAM: 18: 63 Hockley Hill. Tel. Northern 1266



London's finest new secondhand Value
ARCHITECTS' PLAN CHESTS



ENGERT & ROLFE LTD
INODOROUS FELTS
FROM STOCK

LONDON E 14 **ER** EAST 1441

NEW FLOORS for OLD

Floors of all Types

Repaired and Renewed

FLOOR RENOVATIONS Ltd

30 LAURISTON RD., E.S. Phone: AMH 5471-5
Sanding machines for hire



KINGSTON-UPON-HULL C.C. (a) 200 houses, Longhill Estate. (b) City Architect's Department, Guildhall. (c) Ign to City Treasurer. (e) Oct. 5.

KINGSTON-UPON-HULL C.C. (a) New Junior department at Longhill Primary School. (b) City Architect's Department, Guildhall. (c) Ign to City Treasurer. (e) Oct. 2.

LONDON—TOTTENHAM B.C. (a) (Contract 1) 42 flats and maisonettes, West Green Road Estate. (b) Borough Engineer, Town Hall, N.15. (c) 2gns. (d) Oct. 5.

MANSFIELD B.C. (a) Public conveniences at junction of Stockwell Gate and Bancroft Lane, Mansfield. (b) Borough Engineer, Carr Bank. (c) 2gns. (e) Oct. 5.

NEATH. (a) Concert hall and skittle alley, Onllwyn. (b) A. R. Morgan, Secretary, Onllwyn and Banwen Ex-Service Men's Club, Club House, Dyffryn-Cellwen, Onllwyn, near Neath.

NEWCASTLE-UNDER-LYME B.C. (a) 8 shops and flats, Windermere Road. (b) Town Clerk, Newcastle-under-Lyme. (d) Sept. 26.

N. IRELAND — NORTHERN IRELAND HOUSING TRUST. (a) Demolition of houses at Moat Street, Donaghadee and erection of 26 dwellings and ancillary works at the site, also erection of 24 dwellings with ancillary works at Cannycreegh Road, Donaghadee. (b) Trust Offices, 12, Hope Street, Belfast. (c) £3. (e) Oct. 7.

NORTHUMBERLAND C.C. (a) Conversion of Doxford Hall, Chathill, into an aged persons' hostel. (b) County Architect, County Hall, Newcastle-upon-Tyne 1. (c) 2gns. (d) Sept. 30.

PORTSMOUTH C.C. (a) 72 flats, Billy Lawn, Leigh Park. (b) City Architect, Municipal Offices, 1, Western Parade, Southsea. (c) 3gns. (d) Sept. 29.

SCOTLAND—BURGH OF DUMFRIES. (a) 45 houses in 9 terraces, Summerhill (all or separate trades). (b) Town Clerk, Town Clerk's Office, Municipal Chambers, Buccleuch Street. (d) Sept. 30.

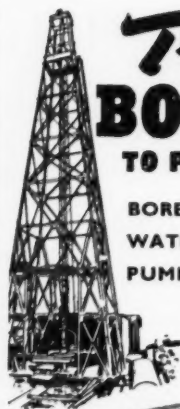
SCOTLAND—BURGH OF DUNBAR. (a) 7 houses and stores (all or separate trades) at Lamer Street for Harbour Area Second Housing Development. (b) Town Clerk's Office, Town House. (e) Oct. 6.

SCOTLAND—CORPORATION OF GLASGOW. (a) Shops and flats, Torglen. (b) Architectural and Planning Department, 20, Trongate, C.I. (c) Oct. 2.

SLOUGH B.C. (a) Public conveniences, The Car Park, Wellington Street. (b) Borough Engineer, Town Hall. (c) 2gns. (e) Oct. 10.

SOUTHBOROUGH U.C. (a) 2 houses and 24 flats, Lady's Gift Farm site, Speldhurst Road. (b) Messrs. Howes and Jackman, 1, Verulam Building, Gray's Inn, London, W.C.1. (c) 2gns. (e) Oct. 26.

STROUD U.C. (a) 18 houses, Cashes Green, Stroud. (b) Engineer and Surveyor, Council Chambers, High Street. (c) Nov. 7.



Trial BORINGS TO PROVE STRATA

BORE HOLES for
WATER SUPPLY
PUMPING PLANTS, Etc.

Telephone: ECCles 2261-2-3
Telegrams: Thom, Patricroft

WATER SUPPLIES
JOHN THOM Ltd
CANAL WORKS PATRICROFT MANCHESTER

STEEL CONSTRUCTIONS FOR EVERY ENGINEERING REQUIREMENT
SHEET METAL WORK
J. GARDNER & CO. LTD.

ENGERT & ROLFE LTD
ASPHALTE WORK
LONDON E 14  EAST 1441

EVANS LIFTS LTD

ABBREY LANE LEICESTER
London Office:
66 VICTORIA STREET, S.W.1



Acknowledgment to Bunce & Rider, F.A.R.I.R.A.
ARCHITECTURAL IRONWORK
Since 1885
HOTCHKISS LIMITED
ASHFORD ROAD, EASTBOURNE. 2424

SUNBURY-ON-THAMES U.C. (a) Storage, office and workshop buildings and additions to existing buildings at depot adjoining the Council Offices. (b) Engineer and Surveyor, Council Offices. (c) 2gns. (e) Oct. 20.

SWANSEA B.C. (a) Scullery-dining room, Peniel Green School, Llansamlet. (b) Borough Architect's Office, The Guildhall. (c) £2. (d) Oct. 3.

SWANSEA B.C. (a) 40 flats, Gendros Estate. (b) Borough Architect's Office, The Guildhall. (c) £5. (d) Oct. 3.

TADCASTER R.C. (a) 12 houses and 2 blocks of 4 flats with incidental drainage and services, Church Fenton. (b) Messrs. Anthony Steel and Owen, 7, Greek Street, Leeds, 1. (c) 2gns cheque payable to Council. (e) Oct. 10.

TOWCESTER R.C. (a) 4 houses, Wicken. (b) G. Berridge, 163, Watling Street West. (c) Ign. (e) Oct. 9.

TRURO R.C. (a) Enlargement of public conveniences, St. Mawes. (b) A. J. Cornelius, 13, Lemon Street. (e) Oct. 19.

UXBRIDGE U.C. (a) (Contract No. 262) 63 dwellings, Corwell Lane, Hillingdon. (b) Engineer and Surveyor, 263, High Street. (e) Oct. 5.

WALTON-LE-DALE U.C. (a) 21 houses and 4 flats, Meanygate Estate. (b) Engineer and Surveyor, Council Offices, Bamber Bridge. (c) 2gns.

WATFORD R.C. (a) 90 dwellings with incidental works at Cecil Lodge, Abbots Langley. (b) Messrs. Dawe, Carter and Partners, 33, Clarendon Road. (c) Ign cheque payable to Council. (d) Oct. 5.

WORCESTERSHIRE C.C. (a) Gig Mill junior school, Norton, Stourbridge. (b) Messrs. Jackson and Edmonds, 116, Colmore Row, Birmingham, 3. (c) 2gns. (d) Sept. 30.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

DUNSTABLE, BEDS. (1) Erection of factory buildings for Vauxhall Motors, Ltd., Luton and Dunstable. (3) George Wimpey and Co., Ltd., The Grove, Hammersmith, W.6. (4) About £750,000.

EXETER. (1) Rebuilding for Westminster Bank, Ltd. (3) W. Brealey, Cowick Street, Exeter. (4) About £91,000.

LONDON E.C. (1) New building. (2) Corn Exchange, Mark Lane. (3) John Greenwood, Ltd., King William Street House, Arthur Street, E.C.4. (4) £75,000.

SADDLEWORTH U.D.C. (1) 104 houses, 12 flats. (2) Greenfield. (3) W. G. West, Ltd., Whitebank, Brinnington, Stockport. (4) £148,000.

ECCLES B.C. (1) Houses, three contracts. (2) Brookhouse Estate. (3) Bower, Moffat and Co., Ltd., 17, Park Street, Manchester, 3. (4) £146,021, £174,970 and £81,127. (1) 84 flats. (2) Mill site, Church Street. (3) William Gornall and Son, Ltd., Ellesmere Street, Bolton. (4) £134,443.

STEEL BUILDINGS

for all purposes

DESIGNED TO SUIT
YOUR REQUIREMENTS

EASY TO ERECT
in spans up to 60' 0"
and in any lengths

SEND YOUR ENQUIRIES TO:

ARNOLD KAHN
WITHAM, ESSEX

Phone: Witham 3140

**ASPHALT
WORK**
TO ALL B.S.S.

COVERITE

(ASPHALTERS) LTD.

PALACE GATES STN, N.22 Besses Park 10212

LIGHTNING CONDUCTORS

J. W. GRAY & SON LTD.

37 RED LION ST., HIGH HOLBORN,
LONDON, W.C.1. Tele. Chancery 8701/2

CHURCH SPIRE RESTORERS

PORTSMOUTH CITY COUNCIL. (1) 138 dwellings. (2) Lake Road. (3) Henry Jones and Sons, Ltd., Aldwell Street, Portsmouth. (4) £251,400. (1) 34 dwellings. (2) Central Street. (3) Hawkins Bros. (Gosport), Ltd., Gosport. (4) £52,900.

RAWTENSTALL B.C. (1) Development of Staghills Estate. (2) Newchurch-in-Rossendale. (3) A. Spencer, 31, Bold Street, Accrington, Lancs. (4) £145,000.

CLYDE. (1) Dock extensions for Clyde Navigation Trust. (2) Shieldhall Riverside Quay. (3) Holland & Hannen and Cubitts (Scotland), Ltd., 127, St. Vincent Street, Glasgow, and Edinburgh. (4) About £574,000.

WELLINGTON (SALOP) R.D.C. (1) 229 houses. (2) Hadley. (3) Towers Wilson and Co., Ltd., Woodthorne Road, Tettenhall, Wolverhampton.

STOCKPORT B.C. (1) 103 houses. (2) (2) Brinnington Estate. (3) Senior Building Co., Ltd., 187 Wilmslow Road, Cheadle. (1) 53 houses. (2) Same estate. (3) J. Foulkes and Sons, Ltd., Fir Tree Farm, Brinnington, Stockport.

WORCESTERSHIRE C.C. (1) Secondary school. (2) Droitwich. (3) T. Lowe and Son, Ltd., Cherry Street, Birmingham, 2. (4) £86,442.

SWANSEA. (1) Premises, for S.W. Wales Savings Bank. (3) E. Turner and Sons, Ltd., Walter Road, Swansea. (4) £45,387.

SPECIFY NORRIS JOINERY

C. W. NORRIS LTD.
FARNWORTH, BOLTON

LANCASHIRE

Telephone: Farnworth 363-4-5



'DASON'

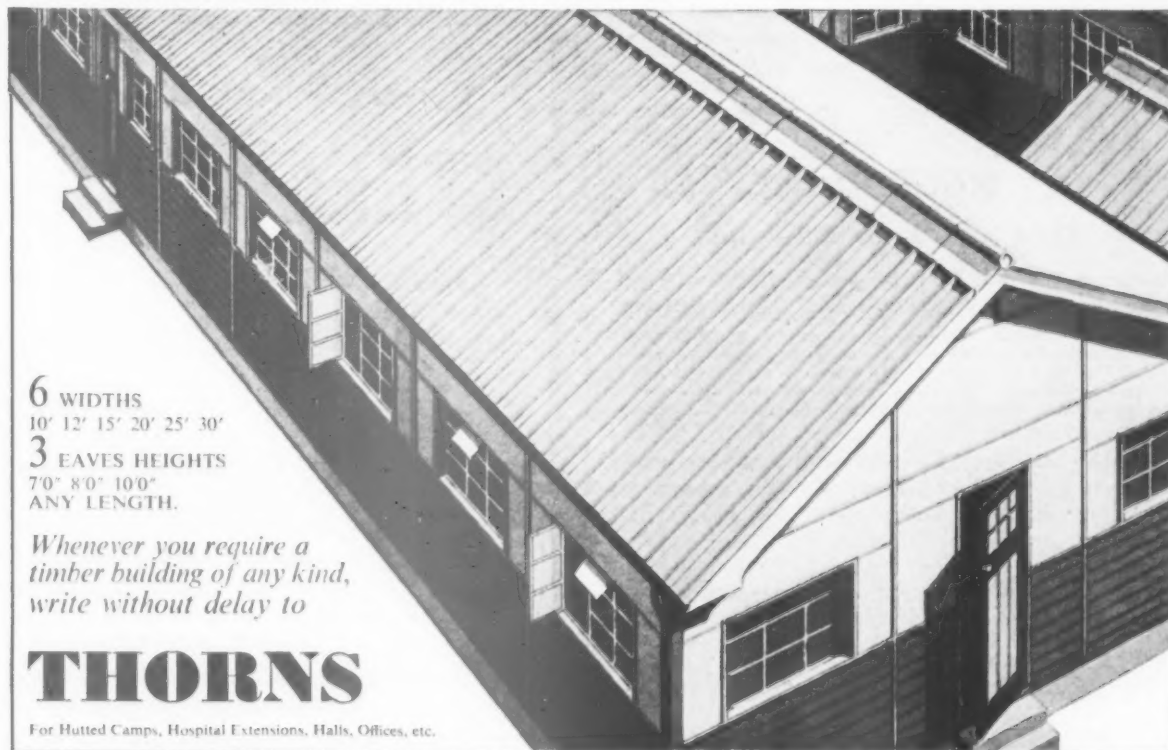
One of the "Red Hand"
quality roofings

D. ANDERSON & SON LTD., Stretford, Manchester

THE VEITCHI COMPANY
LIMITED

RUBBER FLOORING

SOUTHEY RD., LONDON, N.15
STAMFORD HILL 9428



6 WIDTHS
10' 12' 15' 20' 25' 30'
3 EAVES HEIGHTS
7'0" 8'0" 10'0"
ANY LENGTH.

Whenever you require a
timber building of any kind,
write without delay to

THORNS

For Hatted Camps, Hospital Extensions, Halls, Offices, etc.

J. THORN & SONS LTD (Dept 113) · BRAMPTON ROAD · BEXLEYHEATH · KENT

Telephone: Bexleyheath 305.

Established 1896.

BD 530

SOLIGNUM

is the complete answer


to—

ROT

(DRY ROT
WET ROT & DECAY)

Solignum destroys the dry rot fungus wherever brought into contact with it, and gives complete immunity against further attack. Solignum Wood Preservatives, are made to penetrate into the wood and remain as an active barrier against decay, affording protection from dampness, exposure to weather, dry rot, wet rot, wood borers, and all other enemies of Timber. Solignum is easily applied by brush, by dipping or by spray gun.

AND



WOOD BEETLES TOO!

There are 3 kinds of Solignum

Solignum Wood Preserving Stain

For constructional timber, fences, sheds, joints, flooring, etc., to prevent and destroy dry rot fungus.

V.D.K. Solignum Wood Preservative

In Green, Brown and colourless, can be painted over if desired. Essential for greenhouses, netting and canvas.

Solignum Wood Beetle Destroyer

A specially prepared solution to destroy wood boring beetles, i.e. 'Woodworm', in furniture and constructional timber.

Solignum Advisory Service. Let experts help you in preserving your woodwork and avoid costly repairs and replacements. Write for descriptive leaflets and advice **FREE**.



wood preserve it!

Sole Makers — **SOLIGNUM LTD**
Donington House, Norfolk Street, Strand, W.C.2.

JABLO FLUSH DOORS

HIGH QUALITY MODERATELY PRICED
British Made CELLULAR CORE Flush Doors
FACED WITH PLYWOOD OR HARDBOARD

- Freedom from warp and wind.
- Exceptional Lightness.
- High Thermal and Sound Insulating Properties.
- The Utmost Timber economy (.002 Standard per door).

PATENTED—EXTON LICENCE

Tested and approved by the Department of Scientific and Industrial Research.

Reviewed by Chief Adviser's Division, Ministry of Works.



FULLY GUARANTEED

The Jablo Flush Door has all the advantages of a solid core door at less than half the cost and weight - the cellular construction provides continuous adhesion and support to the facings, ensuring dead flat surfaces; undulating surfaces so often associated with hollow framed doors are impossible.

MOULDED COMPONENTS (JABLO) LTD.,
JABLO WORKS, CROYDON.

Telephone: CRO 2201-6922

All Types of ^{MC}

STEELWORK

Designed, Fabricated
and erected by



OLD LEEDS STEEL WORKS,
BALM ROAD, LEEDS

Telephone: Leeds 76614/9.
Telegrams: Corflat, Leeds.

Leeds 10.

- ★ Steel-framed Buildings
- ★ Pressed Steel Rainwater Goods
- to $\frac{1}{4}$ " thick mild steel
- ★ Profile Cutting
- ★ Steel from stock
- ★ Pressings up to
- ★ Guillotine Shearing
- ★ Slitting Sheets and Coils



We built this crane FOR YOU!

Contacts are completed quicker thus bringing down costs when the Wild Fawcett is part of the building plan. Designed to help the builder at every stage, this crane slews, travels, has three speeds to all motions and magnetic brake. Easily transportable and practically self erecting the WILD-FAWCETT is playing a vital part in speeding Britain's Building projects.

THE ALL BRITISH TOWER CRANE

THOS. C. WILD Machinery LIMITED

Consult us also for: Machine Tools, Electric Motors, Electric Power Plant, Hydraulic Plant, Cranes, etc.

VULCAN WORKS • COLERIDGE ROAD • SHEFFIELD

Phone : 41292

dm TW.15

After the disastrous fire in 1212 KING JOHN issued an ordinance in which the following appeared—

"All shops on the Thames be whitewashed and plastered within and without. All houses which can be plastered let them be plastered within eight days . . . those that will not be plastered in that term be demolished."



FIRE

WHAT IS THE MENACE?

A building may be inconvenient, ugly, noisy or unhealthy, without being more than a nuisance to its occupants — BUT IF IT IS A FIRE-TRAP, IT IS A PUBLIC MENACE.

WHICH IS THE BEST WALL LINING?

"Plaster, being made of sand and calcium sulphate is incombustible and highly fire-resisting as a material. When it is reinforced and thereby held in position by wood laths, or better still by metal mesh, its resistance is valuable... Fire has been known to rage fiercely for a time in the flue-like spaces inside a stud partition while the plastered faces remained intact." From 'Fires in Buildings — the behaviour of materials in fire' by Bird & Docking.

WHY IS GYPSUM PLASTER THE BEST?

FIRE RESISTANCE. "MURITE" Plasters when set revert to Gypsum. This mineral contains 20% of chemically combined water which must be driven off before dangerous temperatures can be reached. This water barrier is one of the reasons why 'MURITE' Gypsum Plasters have such excellent fire-resisting properties.

GYPSUM PLASTER

**QUITE INCOMBUSTIBLE
FULLY FIRE RESISTING**

TELEPHONE
NEWARK
2060

CAFFERATA & CO. LTD.

NEWARK - UPON - TRENT, NOTTS.

TELEGRAMS
CAFFERATA
NEWARK



MUREX 'DEEPEX'**ELECTRODES**

**No edge
preparation
for mild steel
up to 1/2" thick**

"Deepex" is a new mild steel arc welding electrode of the deep penetration type. It has been specially designed to produce butt welds in the downhand position in mild steel plate of thicknesses up to 1/2 in. without edge preparation. Thicker material can be welded by the adoption of partial preparation. The electrode is suitable for use with welding plant of normal current capacity and it not only enables considerable savings to be made in plate edge preparation, but it produces neat sound welds. The electrode has been approved by Lloyd's Register of Shipping and the Ministry of Transport. Please write for details.

DEEPEX GOES DEEP!

Section of welds illustrating the deep penetration quality of Murex 'Deepex' electrodes. 'A' shows a weld made with Murex 'Deepex' No. 6 gauge electrode at 330 amps; weld 'B' was made with No. 6 gauge electrode of E.317 classification at 210 amps.

MUREX**ELECTRIC ARC WELDING EQUIPMENT & ELECTRODES**

MUREX WELDING PROCESSES LIMITED, WALTHAM CROSS, HERTS
Telephone: WALTHAM CROSS 3636
T11

Products of

- 1 GOOD DESIGN
- 2 A WELL-EQUIPPED FOUNDRY
and WORKS
- 3 FIRST-CLASS WORKMANSHIP

SEWAGE PUMPS, EJECTORS, VALVES,
DISPOSAL WORKS EQUIPMENT
PENSTOCKS AND ALL TYPES OF
SEWERAGE IRONWORK.

Write to

Adams Hydraulics Ltd.

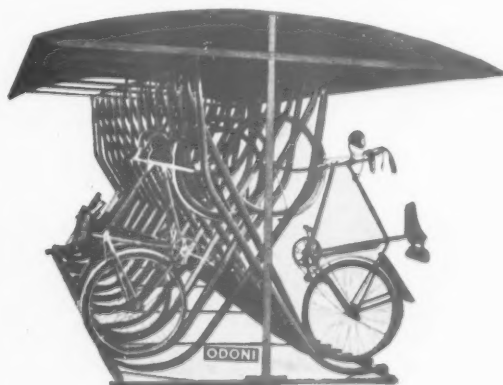
York

Phones: YORK 2047-8-9 LONDON WHITEHALL 8235-6
London Office: 15 DARTMOUTH STREET, S.W.1.

**PARK YOUR CYCLES
THE ODONI WAY**

(Regd. Trade Mark)

Types to suit all possible requirements. Single
or Double sided, for indoor or outdoor use.
Horizontal or Semi-Vertical.



Write for full details to Sole Manufacturers and Patentees —

ALFRED A. ODONI & Co., Ltd.

Salisbury House, London Wall
LONDON, E.C.2. Tele { phone Monarch 0638/9
grams Odoni Ave. London

(Works: London N.W.10.)



The STEAM BRUSH process

CLEANS & PRESERVES

"PRESERVATION BY CLEANING" postpones for many years, often for generations, the expensive repairs that eventually become necessary if the salts and acids in the atmosphere are allowed to eat into stone and brickwork. We are specialists in cleaning by the "Steam Brush" process, by "Nebulous Spray" or with plenty of Cold Water (but never with chemicals) to preserve both the life and appearance of property.

Where decay already exists we can restore a sound face to stonework by methods which have stood the test of more than half a century.



REPARATIONS - DREYFUS LTD

129 Great Suffolk Street, S.E.1. HOP 2366
also at Bristol, Bath, Birmingham

You are invited to write for this informative free brochure or to consult our Technical Advisory Service

Established
1884

FULL PROTECTION

By PLASTEX Weatherproofing Compound

- Repairing Roofs of all Types ●
- Stopping Leaks ●
- Covering New Roofs, Etc. ●
- Recovering Felt Roofs ●
- Repairing and Waterproofing Brickwork ●
- Waterproofing Below Ground Level ●
- Stopping Cracks in Brickwork, Woodwork and Metalwork ●
- Waterproofing Skylights, Window Sashes and Repairing Gutters ●

By IONOLAC Bituminous Paints

- For all Steelwork and Ironwork
- Protects against Corrosion, Rust and Atmospheric Conditions
- Excellent Weatherability
- Brilliant Gloss Finish
- Good Colour Depth
- Suitable for Spray or Brush
- Made in Black, White, Green, Red, Brown, Grey, Cream and Aluminium Colours



DUSSEK BROTHERS & CO. LTD.

THAMES ROAD, CRAYFORD, KENT.

Telephone: Searleyheath 2000 (5 lines)

OFFICIAL APPOINTMENTS

Rate 1/6 per line, minimum 3/-

ANNOUNCEMENTS • CONTRACTS • TENDERS

Close for press 1st post Monday for following Thursday Issue

APPOINTMENTS

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc., if the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is exempted from the provisions of The Notification of Vacancies Order 1952.

BOROUGH OF OLDBURY.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the appointment of a SENIOR ASSISTANT ARCHITECT, Grade A.P.T. VII (£710/25/785) in the Architect's Section of the Borough Surveyor's Department.

Applicants should be Associate Members of the R.I.B.A. The architect appointed will be required to take charge of a Clearance Area Redevelopment Scheme and previous experience of this type of work is desirable. In addition candidates should be experienced in the layout of contemporary housing schemes, design and construction of Municipal houses, flats and shopping centres and capable of taking charge of and administering building contracts.

The appointment will be superannuable and subject (a) to the Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, and (b) to the successful candidate passing a medical examination.

Applications, giving particulars of age, qualifications and experience, together with the names of two referees, should be delivered to the undersigned not later than Friday, 2nd October, 1953.

Housing accommodation will be available to married applicants if this is required.

KENNETH PEARCE,

Town Clerk.

Municipal Buildings,
OLDBURY.

[7324]

PADDINGTON BOROUGH COUNCIL require ASSISTANT QUANTITY SURVEYOR (A.P.T. V—£625 to £675 p.a., £10 p.a. less if under age 26). Final R.I.C.S. (Quantities Section) or at equivalent stage of qualification. Following experience essential—taking off, working up, abstracting, billing; dealing with final accounts; negotiations with contractors; interim and final measurements for certification purposes; and ability to control junior assistants.

Applications (age, qualifications, past and present appointments, experience, names of three referees) to the Town Clerk (A.127), Paddington, W.2, by 1st October, 1953. [7333]

SALOP COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT

APPOINTMENT OF SENIOR ASSISTANT ARCHITECT, A.P.T. GRADE VIII

APPLICATIONS are invited for the appointment of a SENIOR ASSISTANT ARCHITECT on A.P.T. Grade VII. (£760 to £835 per annum.)

Applicants should be Registered Architects, preferably Members of the R.I.B.A., with good experience and a keen appreciation of the design and construction of modern buildings.

A separation allowance of not exceeding 30s a week will be paid to a married officer taking up the appointment, together with third-class return railway fare once a month to visit his family, such allowances to be limited to a period of six months or until such time as the officer is able to obtain accommodation for himself and his family in Shropshire, whichever is the earlier.

Application forms and conditions of the appointment may be obtained from The County Architect, C. H. Simmons, A.R.I.B.A., Dip.T.P., Column House, London Road, Shrewsbury, to whom they must be returned, accompanied by copies of three recent testimonials, not later than Saturday, 10th October, 1953.

Shrewsbury,
September, 1953.

G. C. GODBER,
Clerk of the Council.

[7335]

APPOINTMENTS—contd.

CITY OF OXFORD EDUCATION COMMITTEE

COLLEGE OF TECHNOLOGY, ART & COMMERCE

Applications are invited for the post of HEAD OF THE ARCHITECTURE & BUILDING DEPARTMENT

APPLICANTS should hold the Associateship of the Royal Institute of British Architects and should have had both teaching and professional experience. The person appointed must be prepared to take responsibility for the building trades as well as the architectural side of the Department. The Department is recognised as Grade III on the Burnham Technical Scale and the Salary Scale is £1,190 × £25—£1,340.

Forms of application and further particulars may be obtained from the Chief Education Officer, City Education Office, 77, George Street, Oxford, to whom completed forms must be returned not later than a fortnight from the appearance of this advertisement. [7337]

CITY OF LEEDS EDUCATION COMMITTEE

LEEDS COLLEGE OF ART

Principal: E. E. Pullee, A.R.C.A., F.S.A.E.

THE SCHOOL OF ARCHITECTURE AND TOWN PLANNING

Head: F. Chippindale, F.R.I.B.A.

DEPARTMENT OF TOWN PLANNING

Senior Lecturer in Charge: W. K. Smigielski, Ing. Arch., A.M.P.T.I.

LECTURER AND STUDIO INSTRUCTOR IN TOWN PLANNING

APPLICATIONS are invited for the above post, duties to begin on the 1st January, 1954, or as early as possible.

Candidates should hold a recognized Degree or Diploma in Architecture, together with a recognized Diploma in Town Planning or Civic Design, and should have experience both in design and teaching. Associate Membership of the Town Planning Institute would be an added advantage.

Salary: Burnham Technical Scale for Lecturers, £940 × £25—£1,040.

Application forms and further particulars (stamped addressed envelope) from the Chief Education Officer, Education Offices, Leeds, 1, to be returned within 14 days of this notice. [7334]

BOROUGH OF WILLESDEN

APPOINTMENT OF ARCHITECTURAL ASSISTANT, GRADE APT. III/IV

(Salary £555 × £15 to £630 per annum including London Weighting)

APPLICATIONS are invited for the above appointment on the permanent staff of the Borough Engineer and Surveyor's Department from suitably experienced persons who have been trained as architects. Preference will be given to those persons holding part of an appropriate professional qualification.

The commencing salary will be fixed in accordance with the qualifications and experience of the successful candidate.

Full details and form of application can be obtained from the Borough Engineer and Surveyor, Town Hall, Dyne Road, Kilburn, N.W.6, and must be returned to the undersigned not later than 9 a.m. on Monday, 12th October.

(Sgd.) R. S. FORSTER,

Town Clerk.

Town Hall,
Dyne Road,
Kilburn, N.W.6.
9.9.53

[7331]

APPOINTMENTS—contd.

BOROUGH OF WORTHING.

BOROUGH ENGINEER'S DEPARTMENT.

APPLICATIONS are invited for the appointment of an ASSISTANT QUANTITY SURVEYOR on Grade APT. IV of the National Joint Council Scale of Salaries (i.e., £555 rising to £600 per annum).

Applicants should have passed at least the Intermediate examination of the R.I.C.S. Sub-section III, and must be capable of and have had experience in abstracting and billing and measurement of works on site. Experience in "taking off" and the preparation of Bills of Quantities for new works would be an advantage.

The appointment is subject to the National Scheme of Conditions of Service of Local Government Officers, to the Local Government Superannuation Act, 1937, and to the successful applicant passing satisfactorily a medical examination.

Housing accommodation, if required, will be made available.

Applications, endorsed "ASSISTANT QUANTITY SURVEYOR," stating age, status, qualifications, experience, present and past appointments with dates, and accompanied by copies of at least two testimonials, should be sent to the Borough Engineer, Town Hall, Worthing, so as to reach him not later than Thursday the 1st October, 1953.

ERNEST G. TOWNSEND,
Town Clerk.

Town Hall,

Worthing,
11th September, 1953.

[7330]

LANCASHIRE COUNTY COUNCIL.

PLANNING DEPARTMENT.

PLANNING ASSISTANT (ARCHITECTURAL) A.P.T. Grades I-V (£465-£645) required at Preston. Candidates should be studying for, or possess, an architectural qualification. Salary will be according to qualifications and experience.

Applications giving age, experience, qualifications, present salary and two referees to County Planning Officer, East Cliff County Offices, Preston, by 7th October, 1953. [7328]

COMPETITIONS

COUNTY OF CORNWALL.

PROPOSED SECONDARY MODERN SCHOOL, FALMOUTH

THE County Council propose to hold a limited competition for the design of the above building, estimated to cost £184,000, and in consultation with the Royal Institute of British Architects, have appointed Mr. Howard V. Lobb, C.B.E., F.R.I.B.A., Assessor to advise them on the conduct thereof.

Registered Architects wishing to compete should send their names to the undersigned by the 31st October, 1953, giving such information as they may think likely to advance their claims to be admitted to the competition.

From these names it is proposed to select a limited number to compete, each competitor receiving the sum of £350 for the preparation of his design.

It is expected that the competition conditions will be available early in November, and that a period of one month will be available in which competitors may raise any questions, the final design being submitted by the middle of March, 1954.

All applicants must be prepared to work to this programme and agree to prepare the necessary working drawings to enable tenders to be received to allow a start to be made on the work during February, 1955.

E. T. VERGER,
Clerk of County Council.

County Hall,
Truro, Cornwall.

[7332]

MISCELLANEOUS SECTION

RATE: 1/6d. per line, minimum 3/-, average line 6 words. Each paragraph charged separately.

BOX NOS. add 2 words plus 1/- for registration and forwarding replies which should be addressed c/o. "The Architect & Building News," Dorset House, Stamford Street, London, S.E.1.

PRESS DAY Monday. Remittances payable to Iliffe & Sons Ltd., Dorset House, Stamford Street, London, S.E.1.

No responsibility accepted for errors.

ARCHITECTURAL APPOINTMENTS VACANT

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc., if the applicant is a man aged 18-64 or a woman aged 16-59 inclusive, unless he or she or the employer is exempted from the provisions of The Notification of Vacancies Order 1952.

FOWLER, Grove & Haggard, Chartered Architects, 140, Lodge Rd., Southampton, require Junior assistant. Salary according to qualifications and experience. [7326]

SITUATIONS VACANT

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc., if the applicant is a man aged 18-64 or a woman aged 16-59 inclusive, unless he or she or the employer is exempted from the provisions of The Notification of Vacancies Order 1952.

THE CROFT GRANITE, BRICK & CONCRETE Co., Ltd., Croft, near Leicester, have vacancies in their drawing office for males or females who have either qualified or have reached Inter. R.I.B.A. standard, or who have experience in detailing precast reinforced concrete; the positions are permanent and pensionable.—Applications in confidence to the Managing Director, with details of age, experience, salary required and copies of references. [7317]

SITUATIONS VACANT—contd.

ASSISTANT Quantity Surveyor wanted for Contractors Office in North-west London. A good opening exists for right man who must have had experience. State age, experience and salary required.—Box 0766. [7338]

THE BRITISH OXYGEN COMPANY, LIMITED, have a vacancy for a senior female Tracer at their Head Office in the West End of London. Applicants should have at least six years' practical experience. Please reply, giving full details of age, qualifications and experience to A 0837, British Oxygen Company, Limited, Bridge-water House, Cleveland Row, St. James's, London, S.W.1. [7329]

SERVICES OFFERED

COMET Copying Office, 322, High Holborn, W.C.1. Typing, duplicating, secretarial, speedy service. Call, 4th Floor, Tel. Chancery 3878. [7281]

MUNICIPAL Hire Service. To remind you of the service we give to the public through their local authorities: Cesspool Emptiers, Gully Emptiers, Dust Freighters and Road Sweepers. With or without Drivers at your service.—E. H. Lee, Ltd., New Rd., Woodston, Peterborough. [0132]

FOR SALE

NEW 5/34 Ward portable petrol driven concrete mixers for sale.—Full details from Thos. W. Ward, Ltd., Albion Works, Sheffield. [7314]

STEEL Plate, Sheets and Sections cut to size. Keen prices for small sizes.—E. Stephens & Son, Ltd., Bath St., London, E.C.1. Cle. 1731. [7305]

ALL Mouldings, Plain and Embossed, and Embossed ornaments. Numerous designs.—Dareve's Moulding Mills, Ltd., 60, Pownall Rd., Dalston, E.8. [0086]

BRICKS. Large quantities Dutch Sand Limes. 2 1/2 in English size to Class A-BSS 187. Prompt deliveries. Site prices and fullest particulars from: Alberice, 175-179, Old St., E.C.1. [7325]

CONTRACTS WANTED

SUR-Contracts wanted (labour only), foundations, concreting, drainage, G.P.O., gas, water mains, road pitching; reasonable prices, satisfaction guaranteed; good refs.—Apply, J. M. Folan, 44, Well Close Mount, Leeds, 7. [7340]

PRIVATE DRIVES AND ROADS

PRIVATE Drives, Forecourts, Roads, etc., re-surfacing or new construction by Specialists. Tarmacadam, Tar-spraying, Chippings, Shingle, etc. Estimates free.—Stanley Lucas (Slough), Ltd., 16, Mackenzie St., Slough 21279. [7336]

NISSEN HUTS, ETC.

RECONDITIONED ex-Army huts and manufactured buildings, timber, asbestos, Nissen type, hall type, etc., all sizes and prices.—Write, call or telephone Universal Supplies (Belvedere), Ltd., Dept. 32, Crabtree Manorway, Belvedere, Kent. Tel. Erith 2948. [0126]

DEMOLITION

DEMOLITION AND CLEARANCE.

"WATCH IT COME DOWN"

By SYD BISHOP & SONS, 282, BARING RD., LEE, S.E.12. TEL. LEE GREEN 7755.

OLD MANSIONS BOUGHT FOR SALVAGE. [0124]

MISCELLANEOUS

G. H. SMITH (WATERPROOFERS), Ltd. (late proprietor "Sika" Smith). As waterproofing specialists we solve water problems. Use Smith's No. 1 on general construction, Smith's No. 2 sealing leaks, Smith's No. 3 rapid hardening, Smith's No. 4 rendering wet walls, Smith's No. 5 floor hardening.—41, Spenser St., S.W.1. Tel. Victoria 6091. [7339]



FOR over fifty years Libraco Ltd. have been designing and manufacturing furniture and woodwork of all descriptions for

LIBRARIES
SCHOOLS & OFFICES

The illustration shows a corner of the LEWIS CARROLL CHILDREN'S LIBRARY at ISLINGTON, recently equipped by Libraco Ltd.

Write for Illustrated Booklet.

LIBRACO
LIMITED

LOMBARD WALL, WOOLWICH RD., CHARLTON,
LONDON, S.E.7.
Telephone: Greenwich 3366 & 3369

Adamgez Ltd

SANITARY ENGINEERS AND
FIRECLAY MANUFACTURERS

SCOTSWOOD-ON-TYNE

London Showroom: 54, VICTORIA STREET, S.W.1

COLLEGE OF ESTATE MANAGEMENT

(Incorporated by Royal Charter)

St. Alban's Grove, Kensington, W.8.

DAY, EVENING and POSTAL courses for certain of the Examinations of THE ROYAL INSTITUTION OF CHARTERED SURVEYORS (Including the Valuations, and the Building Surveying and Quantity Surveying Sections)

DAY and POSTAL courses for the Examinations for the UNIVERSITY OF LONDON DEGREE OF B.Sc. (ESTATE MANAGEMENT)

POSTAL courses for the Examinations of the INSTITUTION OF MUNICIPAL ENGINEERS THE ROYAL SANITARY INSTITUTE THE TOWN PLANNING INSTITUTE

Full information including details of length of courses and times of opening from:—

THE SECRETARY (Dept. AB). Telephone: WEStern 1546

POST-WAR REBUILDING ...

PORTLAND STONE
MONKS PARK STONE

THE BATH & PORTLAND STONE FIRMS LTD.

Head Office:
BATH
Tel.: 3248-9PORTLAND
Tel.: 3113LONDON OFFICE:
Grosvenor Gardens House, S.W.1
Tel.: VICTORIA 9182-3OFFICE FURNITURE
AND
STEEL EQUIPMENTEnquiries to:
H. R. WOODHOUSE-WILD
10 MUSEUM STREET, LONDON, W.C.1
Telephone: TEMple Bar 4522
— KEEN PRICES —RIBA INTER, FINAL AND
SPECIAL FINALPostal Courses in all or any subjects including
Design and Professional Practice. Consultations
arranged.

THE ELLIS SCHOOL

Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A.
1030, OLD BROMPTON ROAD, LONDON, S.W.7
Phone: KEN. 4477/8/9. and at Worcester

FOR

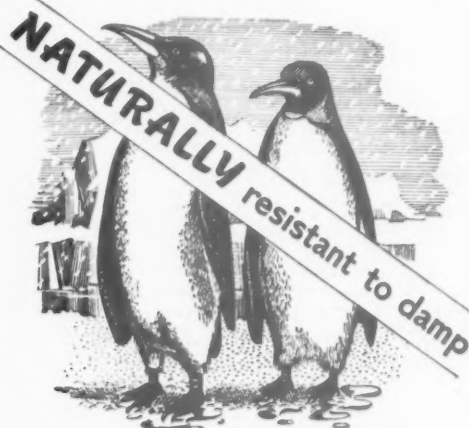
ACID RESISTING
VITREOUS STONEWARE
PIPESENAMELLED FIRECLAY SINKS
URINALS and CHANNELS
GLAZED BRICKS & TILES
FIREBRICKS & FIRECHECKSTHOS. WRAGG & SONS LTD.
SWADLINCOTE, nr. Burton-on-Trent

and subsidiaries

JAMES WOODWARD LTD
SWADLINCOTE,
NR. BURTON-ON-TRENTGEORGE JENNINGS,
PARKSTONE,
DORSETcan offer unrivalled quality backed by
80 years' experience

Catalogues and prices on application

London Office: 39 VICTORIA STREET, WESTMINSTER, S.W.1

Nature has equipped the Penguin to resist damp.
"Aqualite," impregnated with Bitumen, nature's
own damp resistant, is Briggs answer to the
demand of Architects and Builders for the perfect
dampcourse.

BRIGGS AQUALITE

BITUMEN DAMPCOURSE

"Laid in a minute . . . lasts as long as the wall!"

WILLIAM BRIGGS & SONS LTD. DUNDEE.
LONDON: Vauxhall Grove, S.W.8.Branches: Aberdeen, Belfast, Bristol, Edinburgh,
Glasgow, Leicester, Liverpool, Norwich

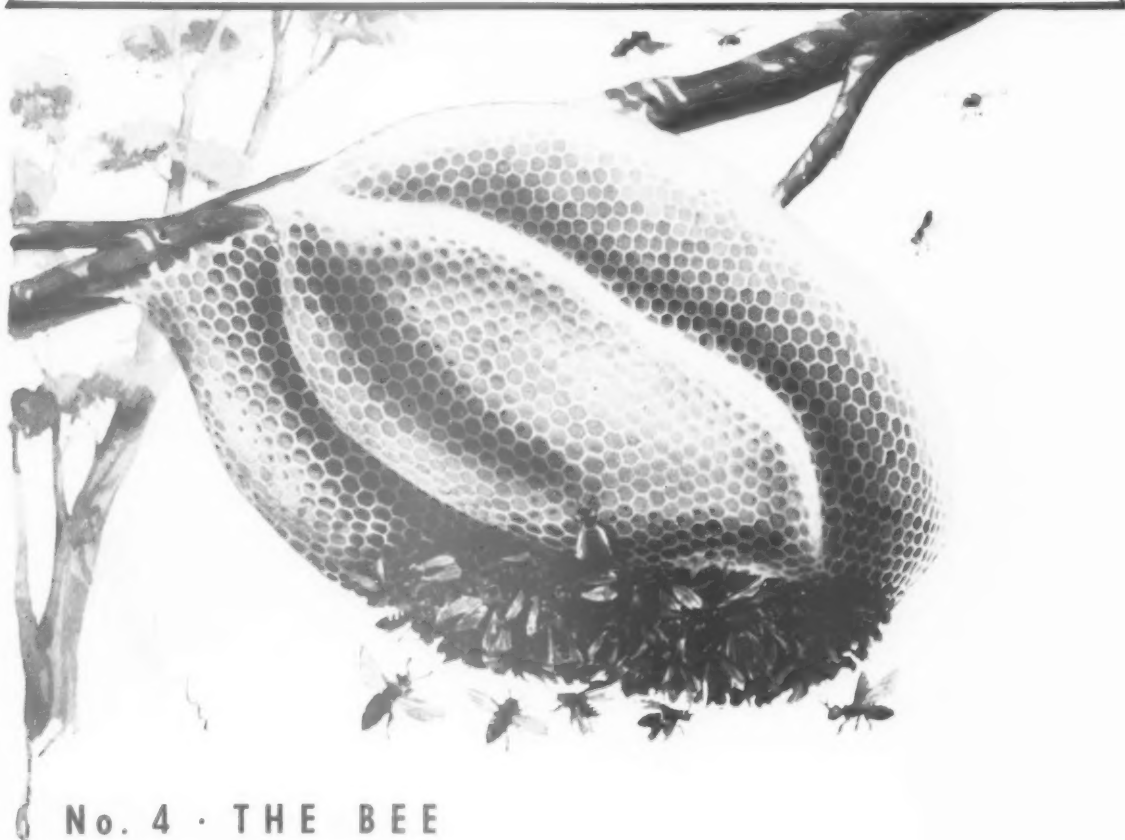
INDEX TO ADVERTISERS

Official Notices, Tenders, Auction, Legal and Miscellaneous Appointments on pages 42 & 43

Adams Hydraulics	40	Dunlop & Ranken, Ltd.	43	Libraco, Ltd.	43	Sankey, J. H., & Son, Ltd.	Outside Back Cover
Adamsz, Ltd.	43	Dusseck Bros., & Co., Ltd.	41	Lister, R. A., & Co., Ltd.	8	Saunders, Wm., & Co. (Wed-	11
Adshead, Ratcliffe & Co., Ltd.	18	Edison Swan Electric Co., Ltd.	5	Luxfer, Ltd.	4	nesbury), Ltd.	26
Albright & Wilson, Ltd.	20	The Ellis School, The	44	Maple & Co., Ltd.	14	Semtex, Ltd.	38
Alexandria Trading Corpora-	35	Engert & Rolfe, Ltd.	35, 36	Margolis, M.	35	Solignum, Ltd.	1
tion, Ltd.	37	Evans Lifts, Ltd.	36	Marley Tile Co., Ltd., The	27	Stelcon (Industrial Floors), Ltd.	35
Anderson, D., & Sons, Ltd.	37	Floor Renovations, Ltd.	35	Metropolitan Construction Co., Ltd.	10	Steven, A. & P., Ltd.	36
Bath & Portland Stone Firms, Ltd.	44	Gardner, J., & Co., Ltd.	36	Midland Woodworking Co., Ltd., The	7	Thom, John, Ltd.	37
Baume & Co., Ltd.	32	Gas Council, The	25	Moulded Components (Jablo), Ltd.	38	Thorn, J., & Sons, Ltd.	21
Blackburn, Thomas, & Sons, Ltd.	44	General Electric Co., Ltd., The	9	Mullen & Lumsden, Ltd.	35	Trussed Concrete Steel Co., Ltd., The	24
Bowaters Building Boards, Ltd.	34	Gibson, Arthur L., & Co., Ltd.	35	Murex Welding Processes, Ltd.	40	Turners Asbestos Cement Co., Ltd.	21
Briggs, Wm., & Sons, Ltd.	44	Gray, J. W., & Co., Ltd.	37	Norris, C. W., Ltd.	37	United Paint Co., Ltd., The	32
British Constructional Steel-work Association	30	Hall, Harding, Ltd.	16	Odoni, A. A., & Co., Ltd.	40	Veitch Company, (The)	37
British Ebonite Co., Ltd., The Building Trades Exhibition, Ltd., The	35	Harvey, G. A., & Co., Ltd.	12	Orbit, Ltd.	19	Walker Crosswell & Co., Ltd.	13
Cafferata & Co., Ltd.	39	Hille of London, Ltd.	16	Pilkington Brothers, Ltd.	22, 23	Ward, Thos. W., Ltd.	15
Cellon, Ltd.	35	Hope, Henry, & Sons, Ltd.	31	Reparations-Drefus, Ltd.	41	Wardie Engineering Co., Ltd., The	18
Cement Marketing Co., Ltd., The	17	Hotchkiss, Ltd.	36	Reynolds, H. L., Ltd.	38	Wild, Thos. S. (Machinery), Ltd.	39
Clarke Ellard Engineering Co., Ltd.	12	Iliffe & Sons, Ltd.	14	R.I.W. Protective Products Co., Ltd., The	29	Williams & Williams, Ltd.	2, 3
College of Estate Management	43	Kahn, Arnold	37	Robertson, Thain, Ltd.	28	Winterburn, F. A., Ltd.	35
Coverite (Asphalts), Ltd.	37	Ketton Portland Cement Co., Ltd., The	15	Ruberoid Co., Ltd., The	6	Woodhouse-Wild, H. R.	44
Crittall Manufacturing Co., Ltd., The	33	Kinnear Shutters	35			Wragg, Thos., & Sons, Ltd.	44

Printed in Great Britain for the publishers, ILLIFFE AND SONS LTD., Dorset House, Stamford Street, London, S.E.1, by CORNWALL PRESS LTD., Paris Garden, Stamford Street, London, S.E.1.

BUILDERS BY NATURE



No. 4 · THE BEE

The building of comb by bees is, like everything they do, a masterpiece of co-operation and efficiency. The worker bees cling to each other in a pear-shaped mass so that they become very warm. Then, from tiny pockets under the abdomen, frail-looking, clear scales of wax appear. Other bees take the wax to construct the comb.

All the cells, except the round ones in which queen bees are reared, are six-sided, for the bees have found the form which avoids all waste of space, effort and time. Another advantage is that the cells support each other and can therefore be constructed of the lightest materials.

The honey cells are completely waxen and are rendered air-proof with a wax capping. The brood cells, however, in which young bees are raised, have a cap of a porous wax and pollen mixture.

The bees perfect a delicate but craftsmanlike piece of work by sloping the cells upwards slightly from the base, so that they are easier to fill, and safer as receptacles for honey, than if they were built horizontally.

Man has been only too glad to learn the lesson which the bee teaches in light-weight, economical and highly proficient construction.

THOMAS BLACKBURN & SONS LTD

PRESTON · LANCASHIRE

London Office Address : 8, BLOOMSBURY SQUARE, W.C.1

Tel : Holborn 8638

FABRICATORS IN STEEL. CONSTRUCTIONAL STEELWORK. IRON CASTINGS. RAILINGS AND GATES. METAL WINDOWS. FARM IMPLEMENTS

SISALKRAFT

used where
the **BEST** is essential



SISALKRAFT — stands up to the job

SISAL FIBRES

weight for weight are **STRONGER THAN STEEL** !
Over half-a-mile of these super-strength fibres
form the two-way reinforcement in every square
yard of SISALKRAFT.

BITUMEN

Nature's most completely waterproof substance
is heavily coated on both outer sheets of . . .

KRAFT

the **STRONGEST** and **BEST BUILDING PAPER**
for **TOUGH** and **TESTING** uses.

Write **NOW** for technical details and samples.

Don't 'make do' — you can Now have the BEST

USE

SISALKRAFT

TRADE MARK

Sole Distributors for
British Sisalkraft, Ltd.

J.H.SANKEY & SON. LTD.

ALDWYCH HOUSE, ALDWYCH, LONDON, W.C.2. 'Phone : HOLborn 6949. 'Grams : Brickwork, Estrand, London